DE BOW'S REVIEW.

OCTOBER, 1855.

FREE NEGRODOM—THE MASTER AND THE SLAVE.*

If, as has been attempted to be shown by our author, that the free people of color have not been saved from the deepest degradation of condition among those who style themselves *par excellence* their friends; if they are, in the words of a most devoted abolitionist, "*rotting mentally and physically* in our cities;" if abolition of slavery has been followed wherever it has been attempted by ruin and social devastation; if the products of slave labor are never incorporated with the industry and business of the United States and of the world to amounts and with consequences that mock all calculation that cannot number the sands of the sea, what is to be done with this perplexing institution of slavery? Our author answers, as some of the wisest and most temperate answer, by morally *restraining and governing the power reposed in the master like every other human power*, as the power of husband over wife, parent over child, master over his free-born apprentice, and the power of political government over the subject. In no other way has Providence guarded the dearest and most important relations of social life. Not by municipal laws alone, even when they second the yearnings of the heart, not by avoiding all abuse and perversion of power, for abuse is necessarily incident to its possession, but the interests of life are guarded by both combined, the enlightened conscience, and humane and merciful laws.

Social condition and character cannot be formed at the beck and will of political reformers; manners in all states of society are stronger than laws, and constantly override them. The slaves of the West Indies, generally, have been transferred directly from the bosom of African barbarism to a barbarism of most oppressive labor, scarcely superior in happiness or the

*This article is in conclusion of those in the last number, entitled "Cotton is King," see pages 263, 308.

means of social improvement to the one they had left. The missionaries say that "the free colored people of Jamaica for nearly three hundred years were entirely without the gospel, and it gained a permanent footing among them only at a few points at their emancipation twenty years ago, so that when liberty reached them the great mass of the Africans in the British West Indies were heathen." (Note, page 149, and Rev. Mr. Phillippe, for twenty years a missionary in Jamaica, in his "Jamaica, its Past and Present Condition.") Our own colored race were, at their introduction into the British colonies two hundred and thirty years ago, in the same condition of heathenism, rife with all the superstitious ignorance of Fetiche worship, laboring "under the disadvantages of *hereditary heathenism* and *involuntary servitude*." The superiority of our negroes to their countrymen in the native wilds of Africa is established in the most incontrovertible manner by our colony of Liberia. There, in all the intercourse of the Afro-Americans with the natives, the mental and physical superiority of the former has been most signally established; they have raised themselves to an enviable attitude of mediators and arbiters in most of the disputes among the barbarian chiefs of the coast of Africa where they have settled. "The republic of Liberia has been conducted from infancy to independence almost wholly by *liberated slaves* and those who were born in the midst of slavery." (Note, page 154.) How comes this most remarkable result? Our author answers, most forcibly, "Slavery is not an element of human progress under which the mind necessarily becomes enlightened, but Christianity is the *primary* element of progress, and can elevate the savage, whether in bondage or freedom, if its principles are taught him in his youth." Both the West Indies and the United States began their system of slavery with savage men. "For three hundred years" the slaves of the former "were destitute of the gospel, and their barbarism was left to perpetuate itself. But in the United States the Africans were brought under the influence of Christianity on their first introduction," "and have continued to enjoy its teachings, in a greater or less degree, to the present moment. The disappearance from our colored people of the heathen condition of the human mind, the incapacity to comprehend religious truths, and its continued existence among those of Jamaica, can now be understood." "But while all this must be admitted of the colored people of Jamaica, it is not true of those of our own country, for long since they have cast off the heathenism of their fathers, and have become enlightened in a very encouraging degree. Hence it is that the colored people of the United States, both

bond and free, have made vastly greater progress than those of the British West Indies in the knowledge of moral duties and the requirements of the gospel." (Pages 148, 151.) Time, long time, and favorable culture are, then, essential to the improvement of the African race as well as any other. And these are to be obtained by the voluntary and cordial co-operation of the slaveholders with the other friends of the slave.

Nothing under our government is to be expected in favor of the slave by *abuse and vituperation of the master*. This may go far, as it has already done, to inflame the parties against one another, and, by the common tendency of the human mind, to disaffect the slaveholder against his assailants, and indispose him to adopt their projects. It will go farther, and by inevitable retaliation and irritated feeling will rivet the bonds of the slave tighter than the generous spirit of a Christian and republican people would naturally incline them, if unprovoked. The American slaveholder is no West India planter, subject to the prejudices, or, it may be, the caprices, of conventions and parliaments on this or on the other side of the Atlantic. He has been not only for one hundred and fifty years the constitutional and legal owner of his slaves, but he is more: he is their political master, enacting the laws which govern the acting of both bond and free. How infatuated, then, the course of our abolitionists who, so far from appealing, in Christian and patriotic tones, to the conscience and the judgment of the slaveholder, condemn him absolutely, and assume the peremptory authority of a master? Do they forget or disregard the paramount obligation of a fair and free social compact, joyfully entered into by all parties, slaveholders and non-slaveholders, at the time as a city of refuge, the salvation of an expiring republic? Do they despise the administration of this republic which, for sixty-four years, has excited the admiration of the world, and secured the greatest mass of social happiness on the earth? So much so has this been the case, that it has well been called "the last asylum of oppressed humanity." But while the opinion that slavery is *malum per se*, or absolute wickedness, incapable of any indulgence or extenuation, may be entertained by some whose worship of their *higher law* is so exclusive as to override all other moral principles, all reverence for national compacts, and respect for the lawful rights of fellow-countrymen, there is another party to this great social issue. There are some portions of this people quite as moral, as patriotic, and as gallant as their antagonists, who, while they deplore the existence of slavery, su bm

to the necessities of their involuntary social position, and endeavor to infuse into the dominion entailed by it all the mercy and consideration of which it is so largely susceptible; who, while they dread and most reasonably abhor the manumission of a degraded race, among themselves, still feel bound by all their duties to God and man to render their power productive of good and enjoyment to their slaves. They appeal to the principles which should regulate and govern all the forms of human power—the eternal principles of justice and right. They are as applicable to the relations of master and servant as they are to the other relations of life. There always has existed, and, I fear, ever will be, much abuse of power in all these relations; but it would be but feeble sense and bad logic that should maintain that these indispensable relations of society should be abolished, because they are and must be subject to abuse and perversion. This is at once to impeach the whole system of God's providence and the free responsible agency of man. Granted, for the sake of argument, that domestic slavery is intrinsically and absolutely wrong, and contrary to the rights of man, (as, in my soul, I believe,) still an enlightened and conscientious master may well hesitate to renounce this power, devolved upon him by the laws around him, till some provision shall be made to secure him and his country from the mischiefs and ills that have ever followed the unprepared manumission of masses of men. It is a pure question of self-preservation with the present generation. Is there anything fallacious or sophistical in this argument? Is power over a human being as a servant, even for life, essentially different in its obligations and duties from the power over a wife, a child, an apprentice, or a subject of political government? If, in some of these relations, the tenure of the power is less than the usual relation of master and slave, that does not affect the power itself, but its duration.

All peaceable attempts to regulate this moral power except by moral means, and not by artificial laws alone, must prove futile. It is contrary to the nature of man and the laws which govern his thoughts and his habits of action. How then is this direction to be given? Let the teachers of Christianity answer, and let them act towards our slaves as Jesus Christ and their primitive predecessors acted towards the slaves of the Roman empire. Let them act as succeeding generations have done towards the serfs of the middle ages of European history. Let them oppose sin and wickedness in all men, of all colors and conditions. Let them inculcate, after the example and precept of Jesus Christ, love and mercy

to all men, and leave the fruits of such opposition and such action to the Ruler of the Universe. Or, will the friends of the slave, by some grand heroic act, adopt an agreement of non-importation and non-consumption of slave products from all parts of the world? Are they ready to perform their respective parts in a grand act of secession from all modern commercial society? Will they retire into a circle of universal freedom of equality for the exclusive intercourse, protection, and enjoyment of the freemen, the pure and unsophisticated freemen, of the universe? How shall this expatriation be effected, and when shall this blessed union of these modern saints or American Quixotts take place? We wait patiently for the answer. But while this may be meditating, let me, in sober earnestness, conjure my fellow-countrymen laboring under the infatuation of abstract, unqualified abolition, to take their answer, with God for their counsellor and witness, into solemn consideration. It is, believe me, no light flitting matter of occasional agitation; it is pregnant with the hopes and interests of centuries for millions of your fellow-citizens, members equal to yourselves of the same glorious confederacy. Ought you to expect to change the habits of thought, the manners and laws of a people, free as yourselves, suddenly and violently? Are you ready for this anti-social object, to plunge this republic—the world's best hope of freedom—into the countless calamities of civil war and probable despotism? Would you submit to a social interference so repugnant to all the feelings and habits of the human mind at all alive to its rights? Should the planters of the south, under the influence of a similar infatuation, forbid your use of their cotton, their rice, sugar, and tobacco, and for that purpose, stop all intercourse with you directly and indirectly, would you acquiesce in the outrage? Would you not invoke, in such a case, the equal liberties of the confederacy and human nature in behalf of your violated rights? Yet these same southerners might well say that such measures were but retaliatory for your own unconstitutional and forcible resistance to the enjoyment of their solemnly covenanted rights. If trade and commerce have not lost their humanizing charms, for which the merchants, the sailors, and the fishermen of New England have for centuries labored and shed their blood, let them protect their customers of common friends, so a benefit enjoyed by either is more and more regarded as a benefit enjoyed by the whole; and in like manner an injury received by one is considered as an injury received by all. Their bond of sisterhood, formed in principle and cemented in interest, is likely to be as durable as the States which it encircles.

the south in their equal rights. Believe that the spirit which blazed in your own bosoms at Lexington and Bunker Hill, and burnt still brighter at Saratoga, equally animates the breasts of your fellow-citizens of the south. The men who, in much greater weakness than yourselves, defied the power of Great Britain at Fort Moultrie, Guilford Court House, and the Eutaw Springs, harbored in swamps with Sumpter and Marion, and bore the worst horrors, for years of foreign oppression, have left the same sacred spirit in the hearts of their descendants. The blood of liberty still courses warm and fresh through all your bosoms; believe no dishonor of one another, meditate no wrong. Return to the old peace and harmony that have consecrated the efforts of our common fathers, through centuries of trial and hardship, till they have reached our present national happiness and renown. Forget not that *Greene* was second but to *Washington;* and that both counselled and fought for our common liberty and independence. Let no extravagant sentiments of any description degrade the honors which the fathers of the republic have so gloriously achieved. Let Sparta keep her Helots, and Athens her freemen; but let Lacedæmonians and Athenians be both banded together, heart and hand, at the Thermopylæ and Marathon of America. Believe me, the controversy between the sections of the republic is rapidly approaching the dread alternative of *equal* and *peaceable* rights, or *civil war.*

To my slaveholding countrymen let me also address a few words of sincere and well-meant advice. Claim no divine right of master over slave; let it lie in the same grave, in which our author buries it, with the divine right of kings. Rest the maintenance of slavery on the actual expediency, the necessity, and constitutionality of your present involuntary position. Continue to infuse into your treatment of the inferior race, placed by Providence in your power and under your responsible care, every comfort and indulgence consistent with the relations of superiority and subordination, which, I know, must at all hazards be preserved. Cherish the noble and heavenly hope of elevating this degraded race, and, through them, the African world from loathsome barbarism and misery. Give Christian hope and principle the freest scope among your slaves, as is now extensively done. Thus the happiness of life here may be secured, and higher and eternal existence enjoyed by both master and slave. Prepare this unhappy race, by their probation in your service, to go forth free, and bless the land of their ancestors. Let this be the retribution of America to Africa for the hardships

INTERESTS OF THE SLAVE AND FREE STATES AND OF THE UNION.

The following articles are from an able pen, and are the offspring of a patriotism pure and high, and altogether of that sort which lived and breathed in the "Spirit of '76." We have read them over with interest and pleasure, having been furnished with a copy by a friend, and believe that every reader of the Review will be pleased with their republication. They were written for the Journal of Commerce, and are complimented in the National Intelligencer:

"There is no party, no association, political or reformist, no *ism*, to which he, the writer, does not attribute its share in the dissensions which are threatening to convert the blessings we have hitherto enjoyed under our admirable Constitution into curses worse than those that followed the public denial of a Supreme Being and the idolatrous worship of a prostitute Goddess of Reason in the bloody days of the French Revolution. There may, perhaps, be some expressions or reflections in the piece which we should have been pleased to see softened or modified, but we have preferred to let the writer use his own mode of argument rather than mutilate it by omission or alteration. It is evident he does not write to subserve the interests of any *party*, but the great body of patriots from all parties and all sections who regard it as their paramount obligation to support the Constitution and the Union. In this he has our hearty concurrence, and it is to aid him in that noble work of a good citizen that we ask the attention of our readers to his remarks."

It is needless for us to add that nothing in the articles, as published, can offend the party feelings of our subscribers at the south, who now, burying all disputes, are abreast battling against the great enemy of its institutions, and its security in the Union. It is in observance of the neutrality necessarily forced upon the Review in regard to political matters, that we omit the fifth article in the series, which is highly laudatory of Mr. Dallas, whom the author believes to have all the great requisites for the presidency, summed up by him at the close of the third. That eminent statesman and pure-minded patriot, for whom, in common with every southern man, we entertain the highest feelings of respect, will not consider us, therefore, invidious in the exclusion of this portion of the series.

THE INTERESTS OF THE SLAVE STATES.—No assertion can be better substantiated by indisputable testimony than that the political interests of the slave States are identical. The measure that would endanger the security of one, could not fail to be felt by all. Of this fact they are perfectly aware, and in view of their peculiar condition they are steadily engaged in tightening the ties which bind them together. They are determined to be prepared for any eventuality, which may be contemplated beyond their geographical limits, for impairing the compromises of the Constitution. Nor are their material or pecuniary interests in any respect hostile. On the contrary, they are in harmonious co-operation, and will be more indissolubly blended, as soon as their public works, under contract, and most of them in an advanced state, are completed. As common danger creates

In two, or at most in three years, from present indications, the capitals of the most widely separated slave States will be brought within seventy-five hours of each other, by railroad communication entirely through slave territory. At an earlier period will the Gulf of Mexico be reached in a considerably less time, from the Chesapeake Bay, while Charleston and Savannah will be within thirty-six hours' travel of Louisville and Memphis. Baltimore, Alexandria, Norfolk, Petersburg, and Richmond, will be directly connected, by locomotive velocity, with Vicksburg, Natchez, Mobile, Pensacola and New Orleans.

Upon the face of the globe there is not so stupendous a railway net-work as that in embryo, which is to embrace in its circle and ultimately develop every foot of southern soil. Texas and Florida, under its influences, will profit alike with Maryland and Delaware. Such mineral and other resources are to be unlocked in the long neglected mountains and valleys of Virginia, North Carolina, South Carolina, Georgia, Kentucky, and Tennessee, as will contribute in as great a degree to the properity of those States, and their southern sisters, as have the products of their luxuriant fields. Scientific discoveries have pointed out to them their hidden treasures, and arranged the manner of their realization. Richmond, from its unequalled facilities for manufacturing, and healthful location, may become the Manchester from which the south will derive its supplies of cotton and woollen apparel; and Knoxville, heretofore shut out from intercourse with the world, the Birmingham, which will furnish it with all that may be required of metallic articles. Its position is central and the centre at which the trains on all the great routes will meet. Its adjacent coal-fields, and iron, copper and lead mines, are numerous and inexhaustible.

The day of dependence upon the north by the south for markets, as for merchandize, is rapidly passing away. With it, social intercourse will diminish in a similar ratio. The incalculable value of the southern travel may be cut off to such an extent as to render it of but little profit. The more mountainous regions of the slave States abound with medicinal springs, of as varied qualities and curative virtues as the celebrated Spas of Germany. Many of them—some quite of the enslaved existence of her children. For the able, masterly, and temperate advocacy of these views, suffer me to press on the attention of all my fellow-countrymen, both north and south, the work which has now received this inadequate but most cordial review.

newly discovered—are surrounded by picturesque scenery, and are perpetually fanned, in the warm months, by invigorating, salubrious breezes. They are all becoming easy of access. Two years hence a railroad ride of twenty-four hours from tide-water will place the seeker after it at the one furthest off. They are destined to speedily be the most fascinating objects of summer attraction on this continent, to the fashionable and wealthy, as also to the "lame and afflicted." Northern cities and watering places were never so prosperous as when thronged with southern visitors. Those visitors, in the main, they must prepare themselves to lose.

France has for some time entertained the notion of establishing a line of steamships from Bordeaux and Havre (those leaving the latter place to land at Southampton) to Norfolk. It is believed that our minister, Mr. Mason, has given the contemplated enterprise such encouragement as he could consistently with his duties, as he was known to be favorable to it before his appointment. It is probable that three or four vessels will be constructed for the purpose by the French government at an early day, and that the government of the United States will authorize the building of two or more, next winter, to run in correspondence with them. The Tehuantepec route will, not unlikely, have its termination on this side of the Gulf, at Pensacola. This would afford by far the most direct, as it would be the most expeditious ocean and land highway from all the capitals of Europe to the southern States, Cuba, Mexico, the Pacific ports, the Sandwich Islands, Japan, Australia, and China. The travel from London or Paris to the Pacific could be performed by this route in sixteen days, and to San Francisco in twenty-three or twenty-four, at the present speed of steamers and locomotives.

Thus we have merely glanced at a few—a very few—of the advantages which the south enjoys for exclusiveness of the north—advantages which are justly appreciated, and will be properly *exploited*, if the existing national sentiment shall be obliterated by the wild, immoral doctrines and doings of abolitionists, free-soilers, know-nothings, and liquor prohibitionists. With no such doctrines will the slave States ever fraternize. To no such governmental doings as they contemplate will they ever submit. The abolitionists would burn the houses over their heads; the free-soilers would deprive them of all influence in the national councils; the know-nothings would abrogate the most sacred principles for which their fathers unfurled the banner of revolution; and the liquor prohibitionists would place upon the federal code book a statute that would be more disgraceful to civilization than

the most despotic public act of the worst tyrant that ever reigned.

For the sake of the Union the south has yielded much, yielded long. It has no more sacrifices to make for its preservation. Its first great, almost fatal mistake was, its submission to the Missouri compromise. That measure was, to all intents and purposes, antagonistic to the spirit of the Constitution. The only question proper to be asked by Congress of a territory, when it presents itself for admission, all other requisitions being complied with, is, whether its reform of government is a republican one—in the sense of the Constitution of the United States. All legislation on the subject beyond this is a gross usurpation of power. Internationally we act, and have uniformly acted, upon the broad and just principle that every people has the right to choose its own form of government. Territories have a similar right, unless they encroach upon the "republican form" which the Constitution "guarantees to every State."

The Constitution itself was the result of sectional and other compromises. If it were not such, it had never existed. Its essence and its excellence—that which is to perpetuate it if it be worth perpetuating—consists in this. Washington, as the President of the convention which adopted it, in submitting it to the States for ratification remarked, among other things:

"It is obviously impracticable in the federal government of these States to secure all rights of independent sovereignty to each, and yet provide for the interest and safety of all. Individuals entering into society must give up a share of liberty to preserve the rest. The magnitude of the sacrifice must depend as well on situation and circumstances as on the object to be obtained. It is, at all times, difficult to draw with precision the line between those rights which must be surrendered and those which may be reserved; and on the present occasion this difficulty was increased by a difference among the several States, as to their situation, extent, habits, and particular interests.

"In all our deliberations on this subject, we kept steadily in our view that which appears to us the greatest interest of every true American—the consolidation of our Union, in which is involved our prosperity, felicity, safety, perhaps our national existence. This important consideration, seriously and deeply impressed on our minds, led each State in the convention to be less rigid on points of inferior magnitude than might have been otherwise expected; and hence the Constitution which we now present is the result of a spirit of

amity and of that mutual deference and concession which the peculiarity of our political situation rendered indispensable."

Now, who have been the disturbers of this greatest of all compromises ever perfected by mankind, so touchingly described by the Father of his Country? Of this glorious Union—"the result of a spirit of amity," and of "mutual deference and concession?" To their imperishable honor, it will be recorded by history, whatever may be the future of distracted and divided America—not the slave States. They, alas! have been the victims—not the aggressors! One of those solemn, obligatory, Washingtonian compromises was, that "no person held to service or labor in one State, under the laws thereof, escaping into another, shall, in consequence of any law or regulation therein, be discharged from such service or labor, but shall be delivered up on claim of the party to whom such service or labor may be due." When a "higher law" dogma pronounced against the execution of this provision in several commonwealths, where was the "spirit of amity" and of "mutual deference and concession" which actuated the illustrious personages who gave us our national being? Departed, alas! and, in its departure, as far as the State by her own act can make it so, the instrument annulled.

The bad faith of the national government to the south, as we have already remarked, commenced in the instance of the admission of Missouri. It was resolutely persisted in, one way or another, until the repeal of that unrighteous measure. If it ever be revived, the slave States will have no alternative—will not pause to seek for one, but to absolve a connexion which is dangerous to their security, injurious to their interests, humiliating to their pride.

With all its safeguards the Constitution was reluctantly accepted by several of the slave States. By far the ablest debate which occurred upon its provisions was in the celebrated Virginia convention, where Mr. Madison, Mr. Monroe and Chief Justice Marshall were described as being only among their equals. Patrick Henry, William Grayson, and George Mason—three of the most brilliant minds that ever adorned any country—were inflexibly and energetically arrayed against its adoption. After many weeks' deliberation, and the employment of all the influence of Washington, then in the meridian of his popularity, in its behalf, it was only carried by a vote of 89 to 79. But never was a compact observed by a party to it with more scrupulous fidelity than Virginia has observed this. She has seen with anguish, in common with her other sisters, its provisions utterly disturbed—in

very mockery of her rights and interests—without rebelling. Hope whispered in their ears, that the north would reflect, and that with reflection, repentance and a joyous morrow would again smile upon the Union But that repentance and the joyous morrow come not. The clouds continue to multiply and thicken, and the horizon bears a lowering, ill-omened aspect. Dissolution, under certain agencies, is assuming the magnitude in danger of almost unavoidable certainty.

We put no words into the mouth of the south. We cannot mistake, no rational man can mistake, its sentiments or its ulterior purposes, who has sojourned in it and seen as much of it as we have latterly. The north has sown the wind. In another number shall we indicate to it how it may yet avoid "reaping the whirlwind."

THE INTERESTS OF THE FREE STATES.—Unlike the slave States, there would be no paramount cementing political interests, no common purpose to effect, no material welfare to advance, collectively, in the free States, were the Union to be divided. Those States might unite at first, though this is by no means certain; but they would assuredly sub-divide, from time to time, until there would be at least five distinct confederations. California, Oregon, and Washington, would most probably at the out-set form a separate government, and Utah and New Mexico another. Common security, rather than common interest, might influence the New England States, New York and Michigan, to form a league, which would be joined sooner or later, under the inevitable operations of the Marcy and Elgin treaty, by the adjacent British provinces. Pennsylvania and New Jersey would likely unite, and incline to the south. So would Ohio, Indiana, Illinois, Wisconsin, Iowa, and Minnesota. Thus, upon the ruins of the Constitution, five independent nations would usher themselves into existence in the free States, with what forms of government it is impossible to conjecture! But sub-divisions might continue, until every State would proclaim its sovereignty—proclaiming at the same time some Hiss or Brigham Young its ruler! Causes for quarrels between them, imaginary or real, would become abundant for the gratification of their belligerent propensities. Real peace, there could be none; on the contrary, incessant and sanguinary wars. Not a day's respite to any of them, perhaps, from intestine commotions of one description or another. Nothing, in short, but an eternal state of political effervescence could be confidingly relied upon. Every government would necessarily have its custom-houses, and be subjected to the annoyance and expense of maintaining them. They would necessarily be so numerous

as to form a sort of military *cordon* around each. Hundreds of thousands of new offices would thus be created, "to eat out the substance" of the laboring masses!

In most of the free States real estate has attained a value which it will perhaps be difficult for it to maintain under the most favorable circumstances, unless there be a vastly increased population. This will not occur. The know-nothing demonstrations, and delirious agitations throughout the north, will deter foreigners from emigrating to this country. They will not flee from one political persecution, rigid though it be, to see another in a distant land in a more objectionable form. They will

> "—— Rather bear those ills they have
> "Than fly to others that they know not of."

Moreover, labor is in better request, and more remuneratingly compensated, in Europe, than it has been for ages. This results from the large amount of the effective part of it that we have been drawing off for the last few years, and the destruction of industrial life which has ensued and is ensuing from the war in the east. The only augmentation, therefore, of population which the free States can reasonably expect will be confined to the natural one. This is ever slow, and may be more than counterbalanced, henceforth, by emigration from the older communities to new States and territories. Without an increase of laboring inhabitants, a diminution in the value of the property of the north, and of the receipts of business men, is inevitable. To use an expression current on 'change, both property and business operations have been "over-bulled." This has resulted from an anticipation of progressive demand—that the future ratio of augmentation was to be calculated by the past. Delusive measurement.

If the Union were to be divided, and commercial and travelling intercourse suspended by the south with the north, every free soil estate, every city and town located on free soil, would immediately depreciate in value from ten to fifty per centum, according to location. Therefore, in a pecuniary aspect, the catastrophe would be the most blighting one in the history of civilization.

How totally different the condition of the south. Neither politically nor pecuniarily would it suffer, if it were impelled to the sad alternative of announcing its separation, and proclaiming to the world its independence. In the first place, as we have heretofore shown, there is the bond, an inseverable one, of slavery to hold it together, strengthened by entirely unconflicting, congenial, material interests. It must be understood that southern property of no description bears an

inflated value. In the main it has not been elevated to a price it would not sustain in any emergency. A system of railroads was necessary to its development, and that system, as practically useful as expanded, is only beginning to enfold its multifarious advantages. It is approximating from embryo to reality, bringing with it its concomitant blessings, without extravagant pretensions. Hence, come what may, the wealth and well-being of the slave States is more sure to experience improvement than deterioration.

Again: the south has been burdened with an unequal taxation for the support of the federal government, which has been a source of thrift to the north, from which it would be measurably relieved. For example, from 1791 till 1845 the principal receipts of revenue at the custom-houses of the United States amounted to $927,050,097, of which the slave States paid $711,200,000, and the free States $215,850,097. We will take a period of four years, from 1833 to 1837, and the figures of Mr. Woodbury, to explain in what number the public money is expended relatively in the two sections. The free States received $65,000,000, and the slave States only $32,000,000, while the latter contributed $90,000,000 to the treasury, and the former but $17,500,000. Therefore, as respects increased taxation, the south would have nothing to apprehend in the formation and support of a new government of its own. Adhering to and adopting anew our present form, with which it is perfectly satisfied when honestly administered, and which is peculiarly suited to itself on account of the reliable stability of character and fixed purpose of its citizens, its annual public expenditures would not exceed half the amount which it pays at present into the national treasury.

But the north must be undeceived upon another point of vast, we may say of primary, importance. With nations, as with individuals, particularly with old and mercenary ones, self-interest is the predominating and actuating consideration. The north supposes—it may have what it conceives good reasons for so supposing—that Great Britain desires, as a measure of humanity, the abolition of slavery in the United States. Great Britain herself may imagine she does, because in the existing condition of relations on this continent it is her interest to imagine thus. But if she do, she is deplorably deficient in the most difficult and incomprehensible of all knowledge, that of knowing one's self. Let the south but once declare its independence of the north, and she would joyously approach, and exclaim to it at the top of her voice: "Come, give us your hand. The balance of power in the western hemisphere no longer excites our alarm. In the

division which has been accomplished our schemes have all been consummated. Our interests are identical, and can be made reciprocally beneficial. Your institution of slavery is indispensable to the salutary workings of our system of political economy! We cannot get along without your cotton wool for our manufactures, your tobacco for revenue, your rice and other surplus grain for food. We will help you to Cuba in order to consolidate your more perfect prosperity and geographical security, and, if you desire it, form an alliance, offensive and defensive, with you."

Similar influences would doubtless operate with France. Nine-tenths at least of her importations from the United States are of southern origin, while the principal comsumption of her manufactories and vineyards, chiefly of a luxurious nature, is confined to the same section. Moreover, she is well enough informed to perceive that she has nothing to fear beyond Mason and Dixon's line from the enactment of prohibitory liquor laws. Southerners are incapable of committing such stupendous absurdities; such outrages upon individual liberty. Between the north and none of the powers of Europe is there a fraternizing tie of material interest. They all want markets for their surplus manufactures, many of which are of a competing description.

Under all the circumstances of the case, it seems to us that the north may not improperly be compared to a reckless, desperate man, sitting with a lighted cigar in his mouth over an open barrel of gunpowder. It is either regardless of danger or unconscious of its existence. It has everything to lose, nothing to gain, as we have concisely explained, in forcing the south to pronounce an everlasting separation; and yet it is hastening, unknowingly we believe to those most interested, the event, by countenancing, if not encouraging, unprincipled aspiring agitators.

The slave States, depend upon it, will not submit to another flagrant encroachment upon the compromises of the Constitution. This fact we wish to impress upon the public mind. They are as silent, as they are of perfect accord, in their resolution to resist, unto a united withdrawal, the restoration of the Missouri compromise, the repeal of the fugitive slave law, or the rejection of Kansas as a slave State, should that Territory present its constitution as such. Upon the north, then, the responsibility will forever rest, if it makes the terrific issue, involved in either of those measures, of having given the impulse to the death-knell of the Union.

Descend to the earth, spirits of Franklin, Hancock, the Adamses, Hamilton, and those of the host of other northern

inflexible patriots who have passed away, and save the blind, infatuated inheritors of your glory from such a degradation!

There is yet time for sufficient reflection before the last fatal step be taken; and if the north is not more fallen than we conceive to be the case, reflection may bring with it hesitation, and hesitation ultimate security. All sensible, all orderly, all patriotic men, must agree in the opinion that the period for a cessation of gamboling and rioting in the wild political sophisms and demoralizing doctrines, which have assumed such a frightful attitude, has at length arrived. If things continue as they are, miracles alone can save the free States from ruin. If they grow worse, they are hopelessly lost. Abolitionism, free-soilism, know-nothingism, liquor prohibitionism, are of a kindred character, tending to the same end. They are alike in deadly array against the spirit of the wise provisions of the Constitution, baneful to the welfare of the State, poisonous to the body politic.

THE DUTY OF THE UNITED STATES.—The generation of citizens of the United States that should be so regardless of its duty as to divide the Union, would merit the execrations of posterity, down to the period when it shall be pronounced there is an end to time. Worthless, mercenary, mean, will we indeed be, if for any consideration, real or illusory, we are influenced to destroy a system of government which has imparted, and is imparting, so many blessings to mankind. Better, far better, were it for us, if we have no nobler aims, no higher destiny to accomplish, than to annihilate the magnificent edifice of liberty, which cost so much precious blood, toil, and treasure to establish and maintain, that the ignorance of the wild child of the forest had been ours. Alas! if the Union fails in our times, it will be the result of political vice more than a want of enlightenment in government duties. No generation has, perhaps, been better informed as to the intent and purpose of the Constitution and its compromises than our own of this day. And it is a deplorable fact, that in the States where book-learning is the most general and the most perfect, schemes which, if carried out, would end in subversion, are most cherished and disseminated. Education, in certain localities, instead of producing and maturing patriots, seems to have been prolific in the yield of traitors and conspirators, as far as relates to what would be the practical workings of their peculiar views. Duty to the State, when the State is founded in justice and administered in integrity, is as imperative a one as the citizen has to perform to contemporaries and posterity. In this republic, where each citizen is a part of the State, the duty is more

obligatory than in any other. Its proper performance can never conflict with that due to the Almighty. The two are separate and distinct, and in natural harmony in their relations. An overpowering voice was once heard uttering in sublime accents—"Render unto Cæsar the things that are Cæsar's and unto God the things that are God's." No higher law observances were demanded. It has been left for the wiseacres of our own country and age to make the discovery that temporal or constitutional law, in enlightened nations, is subordinate to natural or higher law. The Pope never desired more power than this, prior to the Reformation, for the commission of the worst of crimes. The blindest bigotry could originate nothing more startling. If it were to become a recognized principle, there could be neither political nor social morality anywhere in the circle of its operations. Anarchy would be its immediate offspring, and the world rendered

"A mighty maze, and all without a plan."

Transcendentalism in politics would speedily overthrow legislative law, as in religion it would divine law.

Our wonderful national growth, our continued and enlarged well-being, is the result of the happy influence of law upon our citizens. They have been from the first, and, we believe, are disposed to ever be—with comparatively few exceptions—a strictly law-abiding population. They have occasionally been deluded—thousands of them are now deluded—by demagogues and the mischievous doctrines which they promulgate; but we shall not despair of their uncompromising devotion to the Constitution when they discover, as they assuredly will soon, that its provisions are endangered by their leaders.

It is the duty of the United States, as far as possible, so to administer the national government as to give no just cause of dissatisfaction to any citizen. Therefore, it is the part of wisdom that legislation should be within the limits, never going beyond them, of the constitutional guards to the States. Where doubt exists on any question, action should be invariably declined. Any excess of power not distinctly authorized is as much an usurpation in a republic as in a monarchy—dangerous in the extreme, engendering discontent, and impairing loyalty.

Every public measure should stand exclusively upon its own merits. In legislation, that which cannot triumph except upon the "log-rolling," or help me and I will help you, principle, is undeserving a place upon the statute book. Nothing was ever worth achieving, officially or privately,

that was achieved by the employment of unfair means. This statement, we venture to assert, would be endorsed, if their sentiments on the subject could be ascertained, by all political scheme-contrivers and manœuverers who have out-lived their ephemeral fame, and by every adventurer and *chevalier d'industrie*, who has had recourse to dishonest artifices for the purposes of gain. Let the rising youth bear this steadily in mind; and let his first study, when he attains the years of manhood, be the Constitution—making it ever afterwards his guide and his undeviating rule. Many members of Congress, and other officials who have solemnly sworn to support its provisions, in all probability never understood them thoroughly. Hence the danger, in a great degree, to which the Union has been subjected from time to time. The representatives of the States and of the people should ever remember that they have national as well as public local duties to perform, and that they can be discharged in no manner more effective than by guarding against any, the slighest, encroachment, upon the great compact which makes us one people. As long as that is preserved in pristine purity, every State and district in the republic may repose in perfect security—increasing in all rational enjoyments that render life delightful.

For the first position within the republic's gift too careful a discrimination cannot be observed in the selection of the individual. *Principia, non homines* is a motto admirable within itself; but it is measurably valueless, unless in its administration it have men of ample capacity and towering character to sustain principle. The officer, as much as the office, ought to command, particularly in the instance of President, unqualified universal respect. Without enjoying such consideration, his duties cannot be otherwise than laborious, difficult, and perplexing in the extreme, from the day of his inauguration.

He should be the superior, and conscious of the fact himself, of any of his cabinet ministers, even though they were chosen from the first personages of the Union. He should possess unyielding integrity, an accomplished education, experience in governmental affairs, eminent discretion, sound judgment, equanimity of temper, resolution, firmness, frankness, industry, and a good physical constitution. He should be by association and by principle a gentleman—a gentleman in that sense which would preclude him from doing any other than a virtuous private act, and, therefore, render him incapable of committing, knowingly, a wrong official one. Not the least of all, he should be an uncompromising constitutionalist—his past life, in that respect, having been a reliable

pledge to what his future would be—thus affording an insurmountable barrier to the success of any of the political schemists, charlatans, and disorganizers who threaten our ruin.

We can see in our imagination the countenance of the considerate, true patriot, as he peruses this—whether he resides on free or slave soil—brightening, and his eye sparkling with joy, eagerly inquiring, can such a man be found for next President? To the inquiry we are not prepared just now to respond. But let those who, like ourselves, sincerely believe, (and we trust their number is legion,) that the perpetuity, glory, and welfare of the Union require the services of one who comes up to the standard we have pictured, unite with us in searching for him. If he be found, and we believe he could, why should he not be hailed with acclamation, and mere partisan wire pullers—who rule through conventions and quarrel for and over "flesh pots" after elections, be forced to accept and proclaim him? Let us seek honestly and seek diligently for an object upon which so much depends. We shall in a subsequent number give the result of our own inquiries on the subject. In every aspect of the case, in which our destiny is involved, the next presidential election will be of incomparably more importance than was any one that has occurred in our history.

LAW AND LAWYERS.—BY THE EDITOR.

No. II.

ENGLISH COMMON LAW—TRIAL BY JURY—CHARACTER OF LAWYERS.

To all the perfection of the civil law add the element of liberty, the improvements of more advanced civilization, the teachings of a pure religion, the wisdom and experience of many centuries, and you have some idea of the perfection to which the science of law has advanced in England. What Sir Edward Coke says of the Parliament of England may, without hesitation, be applied to its jurisprudence: Si spectes antiquatatem, est vetustissima; si dignitatem, est honoratissima; si jurisdictionem, est capassima; and, to account for its origin and growth, Littleton's quaint derivation of the law of *hotchpot*, "wherein is not put one thing alone, but one thing with another," will suffice.

When we reflect from how many independent and often conflicting sources this vast and comprehensive system has been derived, the wonder is that so many jarring elements could ever be combined into a perfect whole, wherein no-

thing valuable has been lost. Not alone from native lips have the highest eulogiums been pronounced—foreigners, who have taken the pains or have had the opportunity to examine, have expressed themselves in language of unhesitating and unmeasured praise. If there yet remain a few excrescences to mar those fair proportions, it is but the common fate to which everything human is subject.

Of what, then, does English law consist? Let us hurriedly consider its elements. I. The common law presents itself with its various definitions, "common sense," "enlightened experience," "wisdom of ages," "worn-out statutes," &c. This is none other than a collection of rules that have obtained, time out of mind, in the administration of justice; with no higher sanction than prescription, no other repository than the writings of sages learned in the profession, and reports of adjudged cases. Its antiquity may be clearly traced up to the Saxon times, and, if certain writers are to be credited, considerably further. The free and hardy spirit of our fathers could never abide any encroachments upon it. They wrested from King John a confirmation of its privileges; and it is even said that the laws of Edward the Confessor, of which so much is read in early English history, and which won so much favor to the sovereigns consenting to observe them, were nothing more than a compilation of these ancient customs, first made by Alfred, and afterwards completed by the Confessor. II. The statute laws, and these divisions taken together, the *lex scripta* and *lex non scripta* comprise the whole. If we note the great changes through which England has passed, it will easily be observed how foreign accretions have been made to her civil polity. First, we have a collection of barbarous tribes under the denomination of Britons; second, a Roman province; third, a Saxon invasion and amalgamation; fourth, a Danish irruption; fifth, a Norman conquest and establishment. Now, is it not natural, in the formation of law, as in the formation of language, to expect wide traces of all these mutations? The Briton had the dark superstitions of his druids; the Roman brought to his northern dependency that system which had thrived so well on the banks of the Tiber; the Saxon, his bold and free nature, which scorned all restraint; and the blighting footstep of the Norman brought feuds and slavery. The idea of conquest supposes much—new institutions, new maxims, new principles, new laws. Hence that bitter contest between the invader and the invaded—that radical and conservative warfare—that struggle for existence on the one hand, and

supremacy on the other—that ceaseless struggle. With the people that he despised, the Norman would even have blotted out their very language. It was not sufficient to work his system of feuds into the heart of the nation—he must maintain it there; he must deduce its most servile consequences. The system remained—no arm of power could eradicate it. Centuries passed away—new principles were developed—new lights shown—new efforts were stimulated; it fell at last, but furnishes, even to this day, the key to mysteries which were otherwise inexplicable.

With the administration of English law two species of courts are entrusted; the one with, the other without, the intervention of a jury. Of the former, the common pleas and king's bench are examples; of the latter, the chancery or equity. The chancery court presents an anomaly to the student of English law. It is as antique, at least, as the times of Henry III, and has from thence made gradual encroachments upon the sphere of the common law. These encroachments have excited, at times, no little uneasiness and dissatisfaction among the people, ever jealous of the prerogative of their "twelve men," and have been met by a spirit of sturdy opposition on the part of the earlier judges. This dispute, which was carried on with great vigor, and lasted many years, commenced with Sir Edward Coke, chief justice of the common pleas, and Lord Chancellor Ellesmere. Of the peculiar nature of chancery foreigners have had very confused notions; and Mr. Justice Story has shown that even native writers, learned in the law, have strangely erred. That it is ordained to supply, and not subvert, the law—that it acts ex æquo et bono, and is administered at the discretion* of the chancellor, which discretion is said to be a legal discretion—that it differs from all other courts in the modes of trial, proof, and relief—that it extends to numerous cases wherein the law, by reason of its generality, is deficient—and, in fine, that it reaches to all cases of rights recognized and acknowledged by the municipal jurisprudence, to which a plain, adequate, and complete remedy cannot be addressed at common law—are descriptions with which one who is not a lawyer must be satisfied, and one who is a lawyer, unless we are much mistaken, after examin-

* This drew forth the well known reproof of Mr. Selden: "For law we have a measure, and we know what to trust to; equity is according to the conscience of him who is chancellor; and as that is larger or narrower, so is equity. 'Tis all one as if they should make the standard for the measure the chancellor's foot. What an uncertain measure this would be! One chancellor has a long foot, another a short foot, a third an indifferent foot. It is the same thing with the chancellor's conscience."

ing all the books upon the subject, will find a confusion of ideas still existing in his mind. The truth is, it is easier to know what equity does than to know why it does it; and for our own parts, we have never yet seen so clearly why a great part of its business might not, with great propriety, be entrusted to the ordinary courts. But we are on tender ground.

The important part occupied by the jury in the English juridical system entitles it to an extended notice in this place. No Englishman can feel other than a just pride when he considers the distinctive character which it has given to the administration of justice in his country. To the Greeks and Romans it was an institution unknown; and it has gained but partial admission into any of the countries on the continent of Europe, which have been formed upon the basis of the Roman law. The trial by jury has been esteemed the bulwark of British liberty, and its guarantee formed one of the most important stipulations of Magna Charta. All the wealth, honor, liberty, life of the subject, hangs upon its determinations. From its honesty and enlightenment everything may be hoped; from its corruption everything despaired. Cavilling objectors have found much in it to censure, but the enlightened experience and wisdom of many centuries have determined its place among the best, the wisest, and most perfect, of human institutions, adapted admirably to the purposes to which it is applied. "The whole machinery of the State," says one, "king, lords, and commons, all the apparatus of the system, and its varied workings, end simply in bringing twelve good men into the box." If we trace for its origin, we must be lost in the most remote antiquity. It formed a part of the policy of those northern tribes which overran Europe, and traces of it are found wherever they left their impress. These hardy emigrants from the *officina humani generis* had notions of liberty too stern and elevated to condescend to any other judgment than that of their peers. It was then, as it was long afterwards, *Nullus liber homo, aliquo modo destruatur, nisi per legale judicium parium suorum.* When the Saxons were introduced into England, it is likely they brought this institution with them, if they did not find it there as some suppose, or were not indebted to Alfred the Great for its establishment. Certain, in the time of Ethelred, it is mentioned as no novelty. Down to the present day, it has ever maintained its character and dignity, even in the most roubled times. Its sphere has been respectively innovated upon by the Norman trial by battle—the courts of High

Commission, Star Chamber, and Chancery; but it has proved too strong for all of them. Formerly, the heaviest punishment, in the nature of a "writ of attaint of false verdict," was suspended over the jurors' heads; if they flinched, it fell. The consequences of this *writ* were direful in the extreme; its victim was scarcely considered a human being; he was hooted at, execrated, hunted down; he lost every right and every privilege—even his family were infamous; in an instant, in the twinkling of an eye, he was transformed into

> "—— a monster of such hideous mien,
> That to be hated needs but to be seen."

But a writ of such questionable propriety was seldom used, and has long ceased even to be named. If anything can be said in its defence, it must be found in the nature of the jury; in the earlier times it had vastly more power than now. Its members came from the county in which the case originated, and their verdict was founded upon their own personal knowledge, without the examination of witnesses. The writ of attaint might have been needed then, not afterwards.

Every one conversant with English history must remember the great efforts which were made at one time to undermine the power of the jury, and bring it down crouching at the feet of the court. Lord Mansfield led the van, and was a host in himself; Mr. Justice Buller was behind him, full of admiration.* Lord Hardwicke was looked up to with veneration, and other great judges were not wanting. We allude to the attempt which was made to wrest away from the jury, in the question of libel, the consideration of *intent*, and confine them simply to the *fact* of publication. The most distinguished lawyers of the age, backed by the House of Commons and people, took the alarm and rushed to the conflict. Then was there a war of giants. Mansfield was violent, reckless, but great. Junius, behind the scenes, was hurling thunderbolts. Mr. Fox's artillery commanded the House of Commons. The voice of the nation fixed at last the seal of its condemnation on the odious heresy, and the jury was safe. During this famous controversy, so daring was Lord Mansfield in support of his opinions, that he is accused on one occasion of having overleapt the boundary of truth, and sullied his otherwise bright reputation. In

* Lord Mansfield was even then, at the head of the king's bench, introducing those innovations, * * * which, by his own account of it, threw Mr. Justice Buller into a perfect ecstacy of wonder at the depth, the comprehensiveness, and the acumen, of that powerful and ruling understanding.—South. Rev. No. 3, Art. III., by Mr. Legare.

referring to a popular ballad of the times, of Lord Hardwicke—

> "For Sir Philip well knows that his inuendoes
> Will serve him no longer in verse or in prose;
> For twelve honest men have decided the cause,
> *Who are judges of fact as well as of laws:*"

to suit his own purposes, the learned judge made the last line read, at the expense of harmony as well as truth:

> "*Who are judges of fact, but not judges of laws.*"

In the United States, by virtue of a common origin, the English law has been almost universally adopted—the exceptions being found in those cases where a conflict exists between the peculiar institutions of the two countries.—During the colonial relation, the Parliament of England, as of course, had the same sovereignty on both sides of the water. When that relation was dissolved, and the thirteen American States formed together an independent member of the family of nations, English and American law began to diverge. The era of the Revolution is the point of divergence. English statutes, before that period, if they ever were applicable to this country, and have not been repealed, are declaratory of the law now. Since then it has been customary to re-enact here such statutes of the English Parliament as seemed deserving of highest favor, and calculated to give increased efficacy to the administration of justice. What was common law in England in 1776 is common law in this country now, unless altered by statute. English contemporary reports of adjudged cases, and the writings of their sages in the profession, are consulted among us with as much zest as ever, and admitted to as high favor in our courts. With all the enmity we encourage against England—all the rivalry that exists between the nations—there has yet been exhibited, on our part, no indisposition to admire her in those points where she is truly admirable; we admire and imitate.

Under a constitution such as ours, where each State is a sovereignty, and, taken together, all the States, for certain purposes only, constitute a unit, conflicting jurisprudence would naturally be expected; but the common origin of the States, and the extent to which they all draw upon a common source, will always prevent the angle of divergence from becoming very great—the single State of Louisiana forming an exception, where the roots of the civil law have struck down so deeply, and have taken so firm a hold, that the growth of the common law has been retarded. When all the States are acting together as a unit, they acknowledge a

body of law bearing with equal force upon all, and administered in courts of a peculiar nature. These courts, whether district, circuit, or supreme, have jurisdiction co-extensive with the whole country.

Having now dwelt so long upon law, which may not have sufficient interest to keep alive attention, it is time to turn to that class of men who have, in all ages, presided over its administration, who have been its repositories, its priests, its oracles—lawyers. If there be a science of law, and if it have its deep and profound learning, to expect a general understanding of it would be an absurdity. To be sure, there is something paradoxical in the idea of men being governed by ordinances with which they have no acquaintance; and yet, how is it possible that they can have such an acquaintance without devoting much of their lives to its study. For this, how few have the time, if they have the capacity. In view of the law maxim, *ignorantia legis excusat meminem*, taken abstractly, does not Caligula's custom of writing decrees in the smallest possible character, and posting them up in the highest places, lose much of its absurdity? Men, whose researches have never extended into this field, think it remarkable that so many difficulties should exist, so much complexness, so much doubt, and so vast an accumulation of learning, when the principles of justice are so few and obvious. They think that, between man and man, the duties and obligations are of so limited a nature and so easily understood, that all the rules required to govern them might be comprised in the shortest space. These opinions are common, and it is equally common for those ever ready to carp at lawyers to charge upon them all the difficulties in law. For ourselves, whilst we admit that simplicity and conciseness are much to be desired, that they conduce to the perfection of the system, and that the bold hand of the reformer might often be judiciously extended, we cannot, after looking at society as it is organized at the present day, after regarding its minute divisions, and contemplating the extensive, varied, and conflicting interests that rise up and place themselves under its protection, suppose for an instant that anything but a vast accumulation of law will result with the profoundest learning. In a simple state of society a few general rules may suffice, but, as the state grows, a body of jurisprudence will grow up with it in the same proportion. The number of independent adjudicated points in the English law have been estimated at over one million, the development of which must occupy no inconsiderable libraries. It is easier to propose than to carry

out reforms, and when any very extraordinary simplification has been aimed at, the effect has generally been a failure. The rules of law, as now established, have been established for their wisdom, and, although that wisdom may not be discovered always at a glance, or even upon study, it has been frequently manifest when there has been any innovation. It is seriously questioned, by Chancellor Kent, whether anything has been gained by the New York Revised Statutes, which promised so much in the inroads they made upon the cumbrous forms of the common law, and we have heard that a distinguished statesman of South Carolina, (Mr. McDuffie,) having effected something of a similar nature in the legislature, remarked afterwards, that, if God would forgive him for this offence, he would never be guilty of it again.

The profession of the law owes its origin and its importance to these facts. But a very small portion of society could be expected to interest themselves very much in the study and understanding of the laws by which they are governed. There must be a powerful motive to urge men upon this study—the interest which they have in it, from being subject to its control, has never been found sufficiently strong. We note it every day, in the little knowledge of law that exists out of the profession, in the offences ignorantly committed—in the mistakes made by hoary locks in what legal men would term the plainest matters of law. Ambition and emolument are the only moving impulses, and under their influence the highest achievements will be made. Open the wealth, honors, and distinctions of the State before any set of men, and you will have no want of candidates for favor. True, motives of this kind are not the most elevated, but they exist. The honors and dignities held out to the legal profession, in particular, grows out of the absolute necessity for such a profession, and the important part that it plays in conducting the whole operations of society. Hence we find the highest and most honorable mention made of it in every age—we find public counsels filled from its members, and skill acquired in interpreting, ably exercised in enacting law. The bar has been the road to the bench, and the bench to a wide and commanding influence. If we speak of the necessity for such a profession, the reasons are various. In the management of all the important points connected with an intricate case much theoretical and practical skill is necessary, which would be vainly looked for in the parties interested. The rights of the question are often involved in so much obscurity, and the conflicting evidences

are sometimes so great, that the highest powers of mind, combined with patience, industry, and unremitting application, are required to sift out truth from the heterogeneous mass and hold it up in its naked simplicity. True it is, that the community has not always professed to see so clearly as it ought the need of an enlightened, elevated profession, to whom the administration of the laws is to be referred—a profession whose interest, honor, and reputation, incline them to vindicate the sanctity and authority of law, as well as the rights and privileges of those they represent. Elevate the character of lawyers, and you purify the channels of justice—you distribute its clear waters uninterrupted through all the divisions of society. Depress that character—the streams stagnate, throw up their pollutions to the surface, and carry death in their poisonous exhalations. You can only elevate the profession by making higher requisitions upon those who are candidates for its honors. You, by this means, diminish the number of applicants and raise the standard to a higher grade.

The plan now pursued by most of the State in making lawyers is on a par with the labor-saving machinery of the age; the result has been multiplication and deterioration—an overstock of pretenders to legal erudition, who have never aimed higher than to glean a little here and there from Blackstone and Kent, in some miserable abridgement. Admirable examples of ignorance, conceit, and audacity! Standing committees of reproach! Each of the learned professions in this country groan under these inflictions, the law not among the least. It would throw out of their wits some of our learned tyros to submit them to the English ordeal, confine them six or eight years in attendance at an attorney's office, or in going through all the routine of study, exercise, and labor, at the inns of court, and then call them reluctantly to the bar. And yet what has been the result of this system? Has it conflicted anything with the interests of society—with the people's rights? Or has it not fostered into being one of the most learned and celebrated bodies of lawyers that the world has ever known?

In some of the New England States, the legislature and courts, out of a spirit of accommodation, and in deference to the mistermed popular rights, allow any man at pleasure to plead his own cause—thus exhibiting the low regard they entertain for anything like a dignified profession; for we would put the question, can a custom like this have any other effect than to remove all inducement from those who might otherwise bestow their time, talent, and energies,

upon the legal science? Where every man is, or may be at pleasure, a lawyer, what dignity can remain—what honor, what profit? and when dignity, honor, and profit, are gone, what becomes of the profession? Where will be found men of ability and character disposed to wreck their fortunes upon it? You present, in such a state, a field opened to the worthless and abandoned, but closed up to all others. Nor are litigants at court in any degree benefitted by the system. The remark was made long ago, and is as true now, that "He who pleads his own case has a fool for his client." He would save a few dollars by undertaking that for which his past pursuits have in no wise qualified him, and becomes, ten to one, a debtor to his folly in a hundred times the amount.

In South Carolina, until very lately, a single perusal of Blackstone, the work of a few weeks, with some plausibility and address, would have been a ready passport to all the privileges, dignities, and immunities, of attorney at law, &c. We have heard of some such gallant achievements. Even now, although the courts have seen fit to elevate the standard, and exhibit more severity in their examinations, it is clear that six or eight months' study would be an ample qualification; the effect is that crowds continue to flock in, and the name of lawyer becomes more and more a by-word and a jest.

We know that it is common to say a poor lawyer can do no harm. Juvenal said it two thousand years ago;

nec unquam
Sanguine causidici maduerunt rostra pusilli.

And Cicero has made good sport of such a character, calling him by very many hard names, and relating not a few of his blunders.* But are not these principles more plausible than true? We might naturally expect that the community would find out who was best entitled to its favor, and in the employment of legal men would search out those who are most skilled. In part this is the case, but then it must be remembered that folly is contagious, and that somehow or other the inexperienced and unsophisticated are often strangely deluded and cajoled by ignorance and audacity. The worst lawyer will be frequently employed—will work his way into notice; his *hoarse voice* will be heard everywhere in the forum; he will confuse everything with his jargon—bring contempt upon the profession—exclude good men from its ranks—increase the amount and costliness of litigation—and utterly unable to appreciate the high aims and destinies

* De Oratore, lib. 1.

of the profession himself, will sympathize with nothing great, thirst for nothing elevated, occupy no other place than that of barretor, too insignificant, perhaps, to be reached by the arm of the law.

We can scarcely appreciate the thorough system of preparation through which English law students are called upon to pass; their discipline has ever been most rigid, and habits of thought and business are acquired at an early period which adheres to them through life. In the inns of courts, or offices of attorneys, the long apprenticeship is spent. And, in the moot courts, legal questions are discussed with so much power of argumentation and extent of research, that eminent lawyers have been known to refer back, in after life, to these early discussions, and receive from them instruction. Cases are put by all parties; and, in allusion to this custom, the Lord Keeper Dudley, according to his brother, Roger North, used to say, that no man could be a good lawyer without being a good "put case." The custom of this country is to shove students up to the bar with little or no acquaintance with what is technically called practice; an extensive branch of the profession, to be learned only amid the various routine of duty gone through at a lawyer's office. The result is, that they are subjected to a thousand perplexities and mortifications when they are called upon to act, making very frequently the most egregious blunders in the plainest and most simple matters. Whatever amount of reading has been theirs, the discovery is soon made that book learning is not every thing; much must be obtained from other sources; and this, however insignificant it may appear in the eye at first, is as indispensable to a successful practice of the law as any of its leading principles and distinctions. A mere theoretical lawyer will make but a poor affair in a court-house, or amid the pressing calls of business, and be a hundred times chagrined and surprised to find others, with no proportion of his learning, more successful, and oftener consulted. The misfortune is that so many get into the notion that all this office business, as it is termed—these little forms and tedious exercises of drawing out papers perpetually—are the mere drudgeries of the profession, which suit ordinary capacities very well, but higher mind and loftier genius can only be content to seize upon great principles, which, like the staff of Hercules, they may wield with honor. Now, all of this is soon discovered to be a mischievous delusion, and experience very soon convinces that no expectation of becoming great lawyers, without having been great drudges, is a legitimate one. These so much slighted

details soon begin to vindicate themselves—to hold up their grim visages amid many a bright and beautiful prospect, and drag down to earth the giddy aspirant from his high flights and dizzy elevations. He must go to work now to study law, after he has been lawfully entitled "lawyer," and meets with ten times the difficulty that would have attended the student. Pride and the fear of ridicule prevent a resort to others for information in such small matters; books alone must be resorted to, and what is wanted he acquires at a vast expenditure of labor, or remains content with confused notions or downright ignorance, until accident, perhaps, throws it within reach, or grim despair at last drives him from the profession.

Now, the natural way to obviate all this would be to make the same requisitions upon students here that are made in England, or similar ones, at least. We cannot, of course, expect, however desirable, that division of labor which has had so prominent an influence in elevating the profession there. We mean the districting off particular departments, each to be occupied by an independent class of lawyers. Thus, by restricting the sphere in which each is to operate, the greatest amount of learning and skill are ensured, and men, great in a few things, produced, who otherwise had been superficial in a great many. The student in England must make his selection of one of these departments; no intention occupies his mind of being everything that may be included in the term lawyer. He consults his capacities and taste to discover whether they incline him most to be counsellor, advocate, solicitor, conveyancer, or special pleader, and, having determined, throws his whole energies into that field. This system, however, is not practicable in a country like ours; perhaps it will be thought too cumbrous and expensive for the simple notions of our people; their versatility of genius, their activity and haste, their aversion to every thing that seems exclusive, and, above all, their insuppressible desire to be all things to all men—to the Jew, a Jew—to the Greek, a Greek.

With men accustomed to discriminate, it is common enough to counfound the benefits of a system with its abuses, and attach that character to the whole which belongs of right to some of its parts only. The profession of the law has come in for its full share of this distinction. In every age there have been those to rail against it, and heap upon its head all manner of opprobrium. Led astray by a few blots and blemishes upon its ermine, they have *wisely* concluded that all must be corruption. They argue, because an Epsom and a

Dudley have existed, that of necessity every lawyer must partake of their iniquities. The eyes of such men can see nothing clearly, but like Sir John Falstaff, they distort and magnify each object into "eleven men in buckram." But there have not been wanting those of an opposite character, who have had the capacity to perceive and the honesty to confess the reverse of all this—the ability to distinguish, in the clearest manner, between the just aims and noble advance of the profession, and its degeneracy. Our purpose is not to add an undue elevation to any set of men, or become their blind panegyrist; we but press the claims of truth and honesty. If there have been those who have prostituted their talents and learning, and even the law itself, to the vilest of purposes—if the utmost laxity of moral principles has characterized not a few of this profession—if much that has been charged adversely be susceptible of demonstration, all of which we have no disposition to deny, let it not be forgotten that there have been high and honorable spirits engaged in the pursuit—men of genius, learning, and refinement—philosophers, scholars, and patriots—patrons of all that is great and good—men wedded to the immutable principles of truth and justice—men with integrity of heart and honesty of purpose—advocates of liberty and friends of humanity—constellations to illumine the darkest night. And are not these the men such as the science of law left to itself—a science so liberal, so elevating, so comprehensive, would naturally produce; and have they not been produced in sufficient number to vindicate the profession from the illiberal, puny aggressions of those who affect to see nothing truly good and estimable in it? It is the glory of the law that, at all times, such men have stepped forth as its champions, its burning lights, to exhibit to the world the majestic evidences of its elevation.*

* The language of Bolingbroke will be called to mind here, where we have, drawn in admirable terms, the rule and the exceptions. "A lawyer *now* is nothing more, I speak of ninety-nine in a hundred, at least, to use some of Tully's words, nisi leguleius quidem cautus, et acutus præco actionum, cantor formularum, auceps syllabarum. But there have been lawyers that were orators, philosophers, historians; there have been Bacons and Clarendons. There will be none such any more, till, in some better age, true ambition, or the love of fame, prevails over avarice, and till men find leisure and encouragement to prepare themselves for the exercise of this profession, by climbing up to the vantage ground of science—so my Lord Bacon calls it—instead of grovelling all their lives below in a mean but gainful application to the little arts of chicane." We quote at second hand from Mr. Christian, and, in other instances, have taken the same liberty, which we have too much conscience to conceal. "I have seen MSS. referred to," says D'Israeli, "confidently, which could never have met the eye of the writer" "The unlearned," says Mr. George Stephens, in his note upon Burton, "have ever furnished themselves with appropriate scraps of Latin and Greek from this book."

Wherever we find the term lawyer used in the pages of the New Testament, with a single exception, it is one of reproach and hearty condemnation. "Then one who was a lawyer asked him a question, *tempting* him."* "Woe unto you lawyers."† "Behold a certain lawyer stood up *tempting* him."‡ "With a certain orator or lawyer, named Tertullus, who informed the governor *against* Paul."§ What, then, have we to set in opposition to all this? Can any words of eulogy gainsay the words of God himself? Now, what if we should establish beyond a doubt that there has been a continued misapplication and misunderstanding of these passages, and that to bring them to bear upon the profession of the law, at this day, is the very height of absurdity.

"The word lawyer," says Dr. Doddridge, "suggests to us the modern idea of an office which did not exist among the Jews at this time, and has strangely misled some interpreters. These Jewish lawyers (as our translators call them) were the most considerable species of scribes, who applied themselves peculiarly to study and explain the law."

"The lawyers were a superior order of scribes and grave lectures on the law."—*Scott.*

What law? The law of Moses, of course. They partook, then, more of what we should call, in our day, the priestly order; and the corruption of such an order would have naturally elicited from our Savior the most unqualified condemnation. They who seek to extend these passages to purposes never anticipated, have no just or rational employment, we conceive, and derive no authority from their numbers.

The council of Melphi, in the fifteenth century, prohibited the practice of law to the clergy, holding to the idea of its being condemned in Scripture; but the decree of that council could have had little efficacy, for we find it an early maxim in England, "Nullus clericus nisi causidicus."

Congreve would be witty on the profession:

"Lawyer! I believe there is many a cranny and leak unstopped in your conscience; they say a witch will sail in a sieve, but I believe the devil would never venture aboard your conscience."

"As cold as charity in the heart of a lawyer," "Bonus jurista, mala christa," were proverbs in olden time.

"If you go to the law for a nut," says one, "the lawyers will crack it, give each of you half the shell, and chop the kernel themselves."

"Whether it was the ever opening hand of a practising lawyer, ever ready to grasp a fee, or whether a strong bias and habitual disposition for turning every trust and situation in life to their own private advantage, were the reasons why one of the wisest of our kings, with his council, composed of great men, and parliaments themselves, thought it necessary to incapacitate practising lawyers from sitting in the House of Commons, it is certain they were the first set of men expressly excluded."—*Carte's Hist. Eng.*

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* 22 Mat., 35. † 11 Luke, 46. ‡ 10 Luke, 25.

§ 24 Acts, 1. The only Christian lawyer mentioned is in 3 Titus, 13. "Bring Zenas the lawyer on his journey diligently, that nothing be wanting," &c.

"I speak to the face of many here present, the lawyers, of all the people in the land, are the greatest grievances to my subjects; for when the cause is good to neither party, it yet proves good and profitable to them."—*King James First's last speech.*

"Men allured to the trade of law, grounding their purposes not on the prudent and heavenly contemplation of justice and equity, but on the promising and pleasing thoughts of litigious terms, fat contentions, and flowing fees."—*Milton.*

"But when money will hire you to plead for injustice against your own knowledge, and to use your will to defraud the righteous, I would not have your conscience for your gains, nor your account to make for all the world."—*Baxter.*

"These men,
He knew, would thrive with their humility,
So wise, so grave, of so perplexed a tongue,
And loud withal, that could not wag
Nor scarce lie still without a fee."—*Ben Johnson.*

"A lawyer art thou? draw not nigh—
Go, carry to some fitter place
The keenness of that practised eye,
The hardness of that sallow face."—*Wordsworth.*

"What an excellent medley," says old Fuller, "is made, when honesty and ability meet in a man in his profession."

"If there be any instance on record, as some there are undoubtedly, of genius and morality united in a lawyer, they are distinguished by their singularity, and operate as exceptions."—*Junius.*

These are some of the severe expositions of legal character, which have emanated from sources deservedly high in authority, and exhibit the profession, it is conceded, in no amiable light. That they have a foundation in truth we are not prepared to question; but as to the justice of such sweeping, indiscriminate denunciations, it were but fair to put in a protest, for ignorance, political spleen, or private pique, have had no small influence, we may suppose, in their composition. However, it will be for the bar of the present day to determine how far it is assimilated to that of ages past and gone, and whether or not its conscience will be safe in repelling these insinuations and charges, as gross libels against the order. For ourselves, we entitle them such.

But, in turning from these unfavorable estimates of lawyers, we have a cheering prospect to contemplate in another quarter. There have been those to appreciate as well as to condemn, and the bright and glorious representations which they have afforded us will more than balance the dark ones already given.

"If, then, the law itself doth merit so highly of all mankind in general, for that it is the fountain of all benefits, what do the professors of the law deserve which draw these benefits out of that fountain, and derive the same unto every particular person? * * * Doth not this profession, every day, comfort such as are grieved, counsel such as are perplexed, relieve such as are circumvented, prevent the ruin of the improvident, save the innocent, support the impotent, take the prey out of the mouth of the oppressor, protect the orphan, the widow, and the stranger? (Would that this glorious tribute were universally just!) * * * For if it be a worthy deed, as doubtless it is, for a man to defend his

friends and country with his right hand and his sword only, what an excellent service is it to defend them with his speech, his reason and wisdom."—*Sir John Davies.*

"There may be, it is true, in this, as in other departments of knowledge, a few unworthy professors, who study the science of chicane and sophistry, rather than of truth and justice, and who, to gratify the spleen, the dishonesty, and wilfullness of their clients, may endeavor to screen the guilty, by an unwarrantable use of those means which were intended to protect the innocent. But the frequent disappointments and constant discountenance they meet with in the courts of justice, have confined these men, to the honor of the age be it spoken, both in number and reputation, to a very despicable compass."—*Sir William Blackstone.*

"If you are of studious habits, of a decided disposition of mind, not to be influenced by the subject of your study, and of a devotion to truth not to be overcome by sophistry, if you are firmly established in the principles of religion, and if you are one of those elevated spirits that are raised above the world, above its temptations and its opinions, in that case you may embrace these professions, and look up to a Cicero, a Sulpicius,* a D'Aguesseau, a More, a Bacon, a Clarendon, a Hale, a Mansfield, and an Eldon, as your dignified masters."—*Broadstone of Honor.*

"Dr. Johnson thought favorably of the law, and said that the sages thereof, for a long series backwards, have been friends of religion."—*Boswell.*

"I must needs say, that the improvement of reason, the diverting men from sensuality and idleness, the maintaining of propriety and justice, and, consequently, the peace and welfare of the kingdom, is very much to be ascribed to the judges and lawyers."—*Baxter.*

"The manners of lawyers have been such, in every age, as were the first improved and the last corrupted."—*Bishop Warburton.*

The avarice so frequently displayed in the profession has met with its not unrighteous reward from the pen of keenest satire. That such a stain should ever have been suffered upon the legal character is lamentable; for how degrading that appetite for gold, which can only open its mouth when a guinea is glittering before it! An old poet well expresses his indignation here:

"Conscience and the Kyng into the Court wenten,
Were hoved there an hundred in hoods of silke,
Serjauntes hii (they), semede, that serven at the barre,
To plede for penyes and poundes the lawe;
And not for our Lordes love unloose their lyppe once!
How might bet mets (be measured) the mist on Malverne hilles
Than get a mom (word) of their mouth, till money be them showed."

But why so sedulous in bringing up all these charges against lawyers? Is there not as much gross imposture and quackery under the guise of medicine as chicane and low art under that of law? And who was ever filled with admiration even for the clerical character as it existed a century or two ago? Besides, is it sufficiently considered that the bar is a public stand, contemplated by the whole people, and that, as a public character, it is natural the lawyer should be vilified? Who has ever hesitated, when it served, to magnify the faults of public men, and urge them forward into the full blaze of day with pious zeal? But how comes it, we might

* The character of Sev. Sulpicius was one of the finest imaginable, if Cicer be credited. Neque ille magis juris consultus quam justitiæ fuit: neque consti tuere litium actiones malebat quam controversias tollere.

ask, that with such a lavish expenditure of censure on lawyers themselves, those who encourage them into iniquity, and sustain them in it, are unscathed? What has the community to say to those who stimulate the cupidity of the profession by undue arts? Is it not just to take up the lash now and scourge away awhile upon them? Will the community forbear the punishment?

STATISTICAL VIEW OF THE STATE OF ILLINOIS.

PART II.

SOIL AND PRODUCTIONS.

The soil of the State of Illinois is essentially fertile, and her agricultural resources almost boundless. When her entire surface is reduced into judicious cultivation, she will make a larger return, acre for acre, than probably any similar extent of territory on the continent. We have seen that her surface is divided into two principal parts—the prairies and the alluvions of the river bottoms. And what are these prairies but alluvial deposites, varying in fertility as the waters which once covered them have left greater or smaller quantities of vegetable decomposition at one point or another?

It is unnecessary for our present purposes to enter into an examination of the theories of the formation of the prairies and alluvions, to prove that they do or do not arise from the same causes; it is enough for our present purposes to know that the constituents or properties of both are the same, or very nearly so. That the prairies were originally covered with water is perfectly evident; and a depth of water over them was attained, remarks Mr. Schoolcraft, "adequate to the deposition of those successive strata of small pebble-stones, sand, clay, fine, rich loams, and carbonaceous moulds, of which they are composed." Mr. S. continues:

"On the breaking away of the obstruction which kept the waters upon the prairies, the waters would recede gradually into those channels in which it is now drained off, sinking lower and lower as the force of the current carried before it new portions of the yielding rock. The margins of these drains would remain covered with water until a comparatively recent period, and acquire further deposits of alluvial matter. These new deposites would be highly favorable to the after-growth of forest trees; while the intermediate table lands, being first exposed to the sun, would soon be covered

with a luxuriant growth of grasses and various herbage, that would attract from adjoining regions the innumerable herds of graminivorous animals which formerly inhabited the country. The effect of these immense herds of animals feeding upon the nascent plains would be to trample down vegetation and prevent the growth of large forest trees—a result that may be supposed to have been still further promoted by their annual exposure to fire. This hypothesis derives additional weight from an attentive consideration of the mineral character of alluvial deposits forming the surface of prairies, in which we often observe fine, hard, and compacted layers of earth, similar to those which are found at the bottom of mill-ponds where the water has long been stagnant," &c.

Who can estimate, then, the agricultural wealth of a region with so fine a climate, so well watered, and whose entire surface is mould, or an admixture of the *debris* of rocks, clay, sand, or gravel, with animal and vegetable remains?

The State contains 35,459,260 acres of land—of which 12,037,412 acres are included in farms, but only 5,039,545 acres are improved; yet Illinois is the tenth State in this respect. The States having a larger quantity of improved land are—

	Acres of improved land.		Acres of improved land.
New York	12,408,968	Tennessee	5,175,173
Pennsylvania	8,628,619	Kentucky	11,368,270
Virginia	10,360,135	Ohio	9,851,493
North Carolina	5,453,977	Indiana	5,046,543
Georgia	6,378,479		

Of these 12 037,412 acres of land included in farms, 879,049 acres of improved land and 1,487,182 acres of unimproved land lie in the counties bordering on the Mississippi; 183,815 acres of improved land and 287,657 acres of unimproved land in the Rock River counties; 942,656 acres of improved and 1,027,509 acres of unimproved in the Illinois river counties; 317,166 acres of improved and 338,086 acres of unimproved lie in the Sangamon river counties; 288,005 acres of improved and 332,345 acres of unimproved land lie in the Fox river counties; 255,223 acres of improved and 468,526 acres of unimproved in the Kaskaskia river counties; 64,019 acres of improved and 171,707 acres of unimproved land lie in the Ohio river counties; 178,149 acres of improved and 317,773 acres of unimproved land lie in the Wabash river counties; and in the Little Wabash river counties, and in the Kankakee, there are 142,335 acres of improved land and 240,952 acres of unimproved land—that is

to say, 3,298,012 acres of this improved land is genuine alluvion, or very nearly so, and 1,741,533 may be regarded as prairie of all descriptions—wet, dry, flat, and rolling.

About six-sevenths, or 30,451,715 acres of land in the State are out of cultivation, and 23,421,848 are "wild" lands, not included in farms.

The number of farms in 1850 was 76,208, making an average of 66 acres of cultivated land to each farm. Their cash value was $96,133,290 and the cash value of farming implements and machinery was $6,495,561. If the whole State was reduced to cultivation under the present imperfect system, the cash value of farms would be a little short of $673,000,000, and the value of farming implements and machinery would be $44,808,927. It is fair to presume, however, that these figures will be greatly increased when the entire State is actually under cultivation. The bringing together of so large a population, their separation into different pursuits, the improved means of cultivation, and the increased demand for the products of the soil, will place the price of land, the value of agricultural implements, and the productive wealth of the State, far beyond the results of our calculations upon the actual figures of 1850; so that $673,000,000 can be regarded only as a distant approximation towards the value of the real estate in Illinois when her population shall be, instead of 851,470, between 5,950,000 and 6,000,000, or seven times the present value of the real estate, is but the merest approximation to what it will be when the present population is sevenfold greater.

These calculations do not pretend to verge towards even speculative accuracy. No account has been taken of the land occupied by roads, streets, parks, rivers, lake, creeks, &c., or by churches, cemeteries, public edifices, &c.; nor of the extraordinary increase that occurs in short periods in prosperous cities and towns—such an increase as occurred, for instance, in the city of Chicago from 1839 to 1853. In 1839, property in Chicago, valued at $1,829,420, was valued in 1853 at $22,929,937, an aggregate increase of nearly 1,400 per cent.

It is a matter of regret that fuller and more accurate information cannot be obtained as to the geological formation and character of the State. At present there is no source from whence it may be derived. We will proceed, then, to examine rapidly, with the imperfect information at our command, the natural resources of the State, and commence with her mineral wealth.

Marble, lime, and sandstone are found, one or the other in

every county; secondary limestone forms the basis of the rocks in the whole northern portion of the State. At Athens, in Dupage county, fine quarries of milk-white limestone, closely resembling marble, and capable of a high polish, have been found, and from which many of the most beautiful edifices in Chicago have been constructed within the last two years. This stone will ultimately constitute the chief material, where it can be procured with tolerable convenience, for all of our fine public and private edifices, particularly in our cities, and will render them remarkable for the permanence, elegance, and beauty of their structures. Near the city of Chicago a singular stone has been discovered of a dark grey color, a species of marble, with a granulated fracture, from which there is a constant exudation of bituminous matter, which does not, however, injure its value for architectural purposes. The Second Presbyterian church, in Chicago, is built of it; and is greatly admired for its antique and venerable appearance.

If lime should ever become an important element in our husbandry, or valuable for export, vast quantities may be procured in a large proportion of the counties. Recently, kilns have been built, and large supplies have been furnished Chicago from the west bank of the Des Plaines river. Sandstone suitable for building purposes exists in large quantities in the southern counties. When excavated and exposed to the air, it hardens, and is preferred to limestone for many structures.

There are quarries of fine marble in Randolph, quartz crystals in Gallatin and the adjacent counties, and plaster of Paris (*gypsum*) in St. Clair. But generally much more importance is attached to metallic minerals than to any others; and in this department, though Illinois has no mines of gold or silver, she possesses others of far greater value. There are two hilly regions in the State, one in the northwestern portion of the State, east of Galena, the other in southern Illinois, in the counties of Union, Johnson, Pope, Hardin, Gallatin, and Williamson, which seems to be an extension of the hilly region embraced upon and between the Cumberland and Tennessee rivers. These two regions constitute the metallic mineral regions *par excellence*.

In Hardin county lead mines have been worked for some years, but not so profitably as in other sections of the State, owing to the great hardness of the ore, which is due to the presence of silver and zinc. Lead is encountered in vast quantities in the northwestern part of the State. From the year 1822, when the mines were first worked scientifically, to

1835 the yield had been 70,420,357 pounds. As much as 13,000,000 pounds had been smelted in a single year. In 1854, 3,145,613 pounds were received from the Galena region in the city of Chicago. Much of this ore yields 75 per cent. of the metal.

Iron is one of the greatest productions of the State, and its value cannot be over-estimated. It enters, Colton well says, "into every man's wants, and into his constant use, and no man can do without it in a variety of forms. It constitutes the most prominent necessity of war, of peace, of agriculture, of manufactures, of commerce, and, it may be said, of every pursuit of life. It enters even into the finest embellishments of the arts. Time, that most momentous of all movements, carrying with it the destinies of all nations, cannot be accurately measured in its progress without it."

In 1850 the capital invested in the manufacture of pig iron was $65,000, and 5,500 tons of the ore were consumed. In the manufacture of cast iron $260,400 were invested, and 4,918 tons of pig iron and 50 tons of old metal were consumed. The total capital invested in the manufacture of iron was $325,400; the value of raw material, coal, &c., consumed was $197,830; the annual cost of labor $153,264, and the value of the products $511,385.

In the northern counties, particularly at the mouth of Plumb creek, and of several smaller streams, large quantities of copper have been discovered. Small quantities have also been found in the southwestern counties, in the bluffs of the Mississippi, and on the Big Muddy river.

Zinc has been found in considerable quantities in several localities, and small quantities of silver in the county of St. Clair.

Fluate of lime has been discovered in the vicinity of Shawneetown, and buhrstone near the junction of the rivers Mississippi and Illinois.

There are a number of salt springs in southern Illinois. The Ohio saline, near Shawneetown, was once extensively worked. A bushel of salt was obtained from between 250 and 300 gallons of the brine. The springs have been neglected in latter years, but we are not advised as to the facts which caused their general abandonment, except that we know it was from no failure in the quantity or quality of the water. Twenty years ago the Ohio Saline produced 200,000 bushels of salt, the minimum price of which, as established by law, was $1 25 per bushel. Probably the sale of the springs by the State, the repeal of the *tariff* of minimum price and the active competition from the salt works of the

State of Ohio and the Great Kanawha salines in Virginia have prevented these from assuming the attitude of importance which it was thought they would. On the western base of the highlands known as the Oshawano mountains, lying near the Little Wabash, and extending around the alluvions of Shawneetown, there are extensive saline deposits.

There are numerous mineral springs in the State, which are resorted to for their medicinal properties. The more noticeable of these are between Ottawa and Peru and those in Jefferson county. Their principal ingredients are sulphur, iron, and sulphate of magnesia. There are also fine chalybeate springs in Johnson county.

In combustible minerals the State is very rich. Anthracite coal is known to exist in one of the southern counties, and bituminous in vast quantities in every part of the State. Many of the coal mines along the Illinois river have been worked for the past few years, and some for a much longer time, At Sheffield, in Bureau, large quantities are mined, and it is said to be of an excellent quality. Since 1850 this interest has been greatly developed. Several companies have been formed, and are supplying the St. Louis market from St. Clair county. One or two other companies, with a heavy capital, and employing large numbers of hands, are mining coal extensively on the Saline river, in Gallatin county, for the New Orleans market and to supply steamers on the Ohio and Mississippi rivers. This stratum of coal is said to be from five to eight feet in thickness, and it extends from the low grounds on the Wabash river across to the Mississippi, and indefinitely northward. It is supposed to be a part of the same stratum that *crops out* on the Illinois river, and in the neighborhood of Danville, in Vermillion county, on the Chicago branch of the Illinois Central Railroad, and in some of the other interior counties.

Though this interest has not assumed any great magnitude and importance, there are but 1,055 colliers and miners in the State, it is destined to become one of the most fruitful sources of our wealth. In the year 1853, 33,046 tons, or 72,705,000 lbs. of coal were received from the States of Pennsylvania and Ohio by the lake, at the port of Chicago, and 2,077 tons, or 4,569,956 lbs., from the interior of the State by canal and railroads. The consumption of this article is, however, very small now compared with what it must become when the number of manufacturing establishments shall be multiplied, and when a State with so scanty and so unequally distributed a supply of timber shall be teeming with population. The consumption in our houses,

manufactories, smelting-rooms, and laboratories, and on our railroads and steamboats, will be enormous; and the attention of an enlightened public cannot be too soon turned towards its further development. The increasing necessity of the State, as well as the fluctuations in the price of coal, and the uncertainties of our eastern market, demand that it should be done without delay. Without this powerful agent there is little prospect of a nation's rising to consequence in modern times; without it, she cannot rank among the powerful kingdoms of the earth—she is almost at the mercy of her more fortunate neighbors. It has everywhere, when accessible, superseded wood and charcoal. It blazes upon the hearths of our smiths, drives the wheels of our manufactories, lights up our cities by night, and sends us forward on our journeys by land and sea. It fashions all the implements of peaceful industry, and forges all the thunderbolts of war.

In the vegetable kingdom, the productions of the State are rich and varied, and generally resembles those of States in similar latitudes. The following list comprehends the forest trees and undergrowth most usually seen:

Cotton wood, sycamore, American elm, slippery elm, red maple, sugar maple, black maple, soft maple, striped maple, black oak, swamp oak, white oak, pin oak, black sack, overcup white oak, black walnut, butter nut, pecan nut, shag bark, pig nut, chesnut, black birch, yellow birch, white ash, blue ash, bass-wood, hoop ash, sassafras, persimmon, wild cherry, honey locust, swamp locust, papaw, hornbeam, iron wood, beech, coffee tree, white pine, cypress.

The undergrowth consists principally of sumac, dog wood, spice bush, London greenbrier, red bud, hazel, &c., &c.

The supply of timber in the State is limited, but it is thought that it would answer every purpose by economical use, if it were conveniently dispersed, for every part, but it is not, and the want of it has been a great annoyance and expense to the farmer. Wire for the purposes of fencing has been introduced with tolerable success, but farmers are generally having recourse to the Osage orange. This plant makes a thick, impenetrable, and beautiful hedge—hundreds of miles of it are now growing along our railroads and around the larger and better cultivated of our landed estates. In the northern portion of the State large supplies of plank for fencing, &c., are procured from Chicago. It is thought, since the conclusion of the reciprocity treaty with the Canadas, that lumber from the upper Canadian forest will be sold at Chicago much below the prices heretofore prevailing.

There are many varieties of the grape indigenous to the soil, and the experiments in Ohio, Indiana, and Kentucky, as well as some few in this State, show that the best varieties of the foreign grape may be readily domesticated. In 1850, 2,977 gallons of wine were manufactured.

We come now to consider the agricultural interests of the State, which is the basis of all others, and justly held in high esteem among us.

Corn (maize) and oats are the principal productions, the soil being particularly adapted to them. In 1830, the corn crop was 57,646,984 bushels, and the oat crop 10,087,241 bushels. The limits of this article will not admit of our entering into a view of the varied productions of the soil, with the adaptation of the State, or its different parts, to each. We must content ourselves with a simple statement of the amount of each leading article produced in a single year, with their value, from which, in connexion with the land in cultivation, a comprehensive idea will be formed of the agricultural resources and productive wealth of the State.*

In the year 1850, there was raised of—

		Est. value.			Est. value.
Wheat, bush..	9,414,575	$9,414,575	Maple sugar...	248,904	$24,890
Rye.....	83,364	41,682	Molasses, gals.	8,354	4,000
Barley.....	110,795	55,397	Bees wax &ho'y	869,444	434,722
Buckwheat....	184,504	92,252	Hops.....	3,551	1,775
Clover seed....	3,427	17,135	Hay.....	601,952	24,890
Other grass seeds	14,380	28,760	Corn.....57,646,984		28,820,492
Flax seed.....	10,787	16,000	Oats.....10,087,241		2,521,810
Potatoes.....	841,394	420,697	Orch'd products.....		446,049
Peas and beans	82,814	41,407	Garden do.,		
Sweet potatoes	157,433	78,916	exclusive of po-		
Tobacco, lbs...	2,514,861	150,891	tatoes.....		127,494
Wool.....	2,150,133	645,033	Home manufac-		
Butter.....12,526,543		1,252,654	tures.....		1,155,902
Cheese.....	1,278,225	383,467	Wine.....	2,997	2,997
			Total.....		$46,924,716

There were sixteen woollen manufactories in 1850, employing 174 workmen—using 396,264 pounds of wool, at a value of $115,364, and yielding products of the value of $206,572. Their number, and the amount of capital employed in them, has been greatly increased within the past four years. Cot-

* In 1840, there was raised of—

Wheat.....	3,335,393 bushels.
Rye.....	88,197 "
Barley.....	82,251 "
Buckwheat.....	57,884 "
Oats.....	4,988,008 "
Corn.....	22,634,211 "
Tobacco.....	564,326 pounds, 49.09 per cent. increase to 1850.
Hay.....	164,932 tons, 264.96 per cent. increase to 1850.
Wool.....	650,000 pounds.
Value of home manufactures.....	$993,567

ton has been successfully raised in small quantities in the southern portion of the State. Hemp is indigenous, and will become, from the facility with which it is raised, a valuable crop. Clover, blue grass, timothy, and many other grasses, grow luxuriantly in every part of the State. Among the most common fruits may be mentioned the plumb, crab apple, wild cherry, persimmon, black mulberry, cranberry, huckleberry, gooseberry, currant, strawberry, and blackberry. The hickory-nut, butter-nut, black walnut, pecan, and papaw; the apple, pear, peach, and quince; the turnip, beet, rutabaga, cabbage, cauliflower, tomato, and all the fruits and vegetables found in similar latitudes, flourish in Illinois. The castor-bean is cultivated to a considerable extent, and the oil frequently used as a lubricator of machinery, and for lamps.

The relative position of Illinois to the other States of the Union is high, as will appear from the following facts:

She is the tenth State in the number of acres of improved land, and the seventh State in the value of her improved farms. The States having a larger quantity of land in cultivation are—

	Acres in cultivation.		Acres in cultivation.
New York	12,408,968	Tennessee	5,175,173
Pennsylvania	8,628,619	Kentucky	11,368,270
Virginia	10,360,135	Ohio	9,851,493
North Carolina	5,453,977	Indiana	5,046,543
Georgia	6,378,479		

Georgia, sometimes referred to latterly as the Empire State of the south, contains 1,660,800 acres more land than Illinois, and 54,631 more of inhabitants, and has been a member of the confederacy since 1788, while Illinois was admitted thirty years thereafter, yet the cash value of farms in Illinois is $379,833 greater than the cash value of farms in Georgia, and the value of farming implements in Illinois is $511,401 more than their value in Georgia. Alabama, with a poputation approximating that of this State, and an area of 50,722 square miles, sinks still lower in the comparison. The value of her farms is less than ours by $32,010,046! and her farming implements and machinery by $1,279,898. North Carolina, one of the original thirteen States, with a population of 808,903 souls, and an area of 50,000 square miles, and with nearly as much improved land as Illinois, does not make a better figure. The value of our farms exceeds that of hers by $28,241,424! and our farming implements those of hers by $2,474,029. Similar instances could be adduced by reference to the southern States, but it is unnecessary to heap Pelion upon Ossa and Ossa upon Pelion.

In some of the staple products she ranks very high. For example, in the article of Indian corn she is the third pro-

ducing State. In 1850, Ohio produced the largest crop, 59,077,693 bushels, next, Kentucky, 58,675,591 bushels, an third, Illinois, 57,646,984 bushels.

She was the fifth wheat-growing State at that period, the four higher being New York, producing 13,121,498, Pennsylvania, 15,367,691, Ohio, 14,487,351, and Virginia, 11,232,616—and the thirteenth State in the number of her manufacturing establishments producing over $500. She had of these 3,099, and the States having more, were—

Maine	with 3,682		Pennsylvania	with 22,036	
New Hampshire	" 3,310		Maryland	" 3,863	
Massachusetts	" 9,631		Virginia	" 4,433	
Connecticut	" 3,913		Kentucky	" 3,471	
New York	" 23,823		Ohio	" 10,550	
New Jersey	" 4,863		Indiana	" 4,326	

We proceed now, by an easy and natural transition, to the animal kingdom, and commence with the domestic animals. She is the eighth State in the value of her live stock. The actual wealth of the State, in this department, consisted in 1850 of—

Horses	267,653	Increase from 1840	78,991
Asses and mules	10,573		
Working oxen	76,156		
Milch cows	294,671	" "	285,761
Other cattle	541,209		
Sheep	894,043	" "	498,371
Swine	1,915,907	" "	420,653

Of the aggregate estimated value of $24,209,258. The first thing that strikes us with these figures, is the inadequacy of the supply of horses for the actual wants of the State—a want increasing every day, and which must be supplied either by rearing or the more expensive mode of importation from abroad. There are but three and a half horses to each farm, and this leaves none for the drays, carts, wagons, and other vehicles in transporting produce to the railroads, to market, &c.; goods, merchandise, &c., through the streets of our cities and towns; none for our public works, or for the saddle, or the equipage of the wealthier classes—a necessity which will appear greater when it is recollected that no allowance, in giving three and a half horses to each farm, is made for those that are too young for work, and those kept exclusively for breeding. This necessity has been so seriously felt that a resort has been had to oxen and mules, and their inferiority is so great that it is fair to presume that it was the necessity alone which brought them into such general use. Of milch cows there is also a deficiency—the number of cows and other cattle together falling below the number of inhabitants. There is rather more than one sheep for each of the inhabitants, and something over double as many swine. In

the present condition of our prairie pastures, 30,000,000 more of all kinds of domestic animals might be supported.

We have seen that the annual value of the agricultural products of the State, so far as enumerated in our table, was, by a rough estimate, $46,924,176, and the value of live stock, $24,209,258, or together they were of the value of $71,133,974. This will give to each inhabitant an interest in the annual products of the State equal to $84; now, if we add to this the value of the animals slaughtered, the value of the farms, farming implements, &c., each inhabitant, if the property were equally divided, would be entitled to $210, and if we add to this the value of 23,421,848 acres of land out of cultivation, and not included in farms, it increases the amount of each inhabitant's share to $292.

Without taking into our estimate the value of stock or farms, the annual yield of the State is equal to $55 for each inhabitant. Leaving out of view the subject of live stock of every kind, the yield per acre of all the land in cultivation for 1850 was something over nine dollars per acre. To each inhabitant there was a yield of a fraction over eleven bushels of wheat, and a fraction over sixty-seven bushels of corn. These two articles constitute a large part of the support of the population. The rye is principally used in the distilleries of spirits, and the barley in the manufacture of beer, a favorite drink with the German population, who make a vast consumption of it. The oat crop is, for the most part, fed away to the domestic animals.

The average yield of butter from the milch cows was 42½ pounds each, and the average weight of the fleeces of the sheep was 2½ pounds.

We proceed now hurriedly to give a list of the wild animals. In the early days of the State there were many wild hores ranging through the forest and over the prairies. They were stout, hardy, and swift, but under size, they were much used by the Indians, from which they acquired the name of Indian ponies. They were thought to be indigenous, but the better opinion is that they were the descendants of the horses introduced by the early French settlers. The buffalo once inhabited the State, but has now entirely disappeared; also the deer, and great numbers of these still remain. Together they constituted a large part of the support of the early settlers. The brown bear is another native of the State, rapidly disappearing before the advance of civilization.

The following constitute a majority of the wild animals still to be found in the State. The grey wolf, the black wolf, and the prairie wolf; the panther, wild cat, fox, raccoon,

opossum, gopher, and squirrel. The muskrat, otter, and beaver are occasionally found about the rivers and lakes.

The birds are numerous, and of a variety of kinds, but are principally those known in the older States.

Wild turkeys, geese, ducks, swans, cranes, prairie chickens, quails, and partridges are very numerous; so much so, that the farmer has rarely need of a poultry yard.

The rivers and lakes abound in fine fish, the most common of which are the bass, pickerel, pike, trout, perch, and white fish.

There are few poisonous reptiles or troublesome insects; snakes are not so common as in mountainous States, or so poisonous as further south. There are many different kinds of the lizard, but they are generally harmless. There are innumerable frogs in the sloughs and swamps, and some are said to be of the genuine species held in such high esteem by the French *gourmand* for its rich, rare, and *recherche* flavor.

The silk-worm is found in some parts of the State—the honey-bee in every county. The most troublesome insect is the mosquito, which makes its appearance about the first of August, and remains till the 15th of October. But it is impossible in the limits of an article of this kind to enter further into such details.

Such are our resources, which every day will continue to increase. As our population becomes more dense, and the means of support more difficult of procurement, the system of cultivation will be improved, and with it the yield per acre. The sloughs and swamps will be dried up, the alluvial bottoms will be drained, the forests will disappear, the rough places made smooth, and every nook and corner of the State be brought into cultivation. The bowels of the earth will give their rich treasures, and the industry, ingenuity, and enterprise of our citizens will turn them into a thousand forms, augmenting at each turn their own and the wealth of the State.

NOTES ON POLITICAL ECONOMY.

The following notes were prepared in 1842 by the editor, whilst engaged in the study of political economy. They are, for the most part, based upon the able treatise of Vethake, then a text book in the college of which he was a member, and may be considered a convenient though imperfect analysis of it for the use of those who may wish to glance over the whole field of political economy *in a nut shell*. The work of Vethake should be in the hands of every American student.

1. The *province of political economy* is to determine the laws which regulate the production, distribution and con-

sumption of *wealth;* to ascertain the course to be pursued or avoided by governments and individuals in the disposal of the wealth under their control, and promote in as great a degree as possible the happiness of mankind.

2. *Wealth* is utility existing to a limited extent and capable of appropriation. The mere possession of utility does not constitute wealth, or then air, water and light would be thus defined. However, the small number of things useful without possessing wealth are never by their nature the products of labor; hence to produce and consume wealth is synonomous with the production and consumption of utility.

3. *Utility* exists in such objects as can in any degree satisfy any of man's actual wants and desires. Thus, spirituous liquors possess utility. But it must not be inferred from this that the political economist would encourage their use, or adopt a low standard of morality. Far otherwise. The physical well-being of a people about which his science is conversant can be promoted in no more efficient manner than by diffusing as much as possible the benefits of religion, morals and education. The "utile" is not necessarily the "honestum." There may be a good or bad use of an object, a good or bad utility. The man who possesses only a sixpence possesses wealth. By the wealth of a community or nation is meant all the wealth possessed by its members.

Labor.—Disagreeable exertion of body or mind with the prospect of compensation. Hence mere action does not constitute *labor*. Labor is not wealth, it is only the products of labor that are valued.

Exchangeable value.—What is given ordinarily for any product at a given time and place, or in the same market.

Commodity.—What is offered in the market for anything else. Labor is a commodity. *Price.*—Exchangeable value estimated in money.

Money is that commodity which is most frequently exchanged for every other; gold and silver constitute the money of the world; other commodities have been employed. "Paper" is not money, but an obligation to pay *value* estimated in the precious metals. The existence of society requires some commodity that will answer as a medium of exchange. The precious metals have been found best for six reasons: First, their *durability*. Second, *great value in small bulk*. Third, comparative invariableness of their exchangeable value. Fourth, the capacity of being obtained in the same degree of fineness or alloyed with the same proportion of baser metals. Fifth, their divisibility. Sixth, capacity of being assayed and coined.

4. *Wealth* can be appropriated in two ways, to the gratification of present or future wants, and this latter by retaining it unemployed or applying it to the reproduction of wealth.

Every such appropriation of wealth is termed *capital.* The being employed as capital or not has no relation whatever to slowness or rapidity of consumption. The *accumulation of wealth* is its increase through the instrumentality of increased savings, and, therefore, immaterial products admit of accumulation in the proper sense of this term. The wages which the capitalist has saved to pay out are *immaterial* as well as material. The laborer receives for them as well protection from government, medical attendance, &c., as food and clothing. No other test of the *increase* of wealth can possibly exist, whether it be material or immaterial than that a greater quantity of it is produced and consumed in a given time than before. But since nothing more is intended by the accumulation of wealth than its increase, it will be manifestly proper to speak of the accumulation of immaterial products. *This idea has but lately found its way into the science.*

5. The elements of capital are: *Wages of labor. Instruments and constructions* with which labor is performed. *Materials* on which labor is exerted. *Finished commodity* kept on hand by the capitalist. *Money* appropriated to the circulation of the other constituent portions of capital. The wages of labor do not make a part of this money, this would be confounding real with money wages. Whatever is consumed as capital is *productively consumed,* otherwise unproductively. Capital is *fixed or circulating.* Fixed when it suffers only wear and tear in production. Circulating when wholly consumed. It has been customary to consider *immaterial* labor unproductive. But from our definitions (art. 4th) it will be seen that whatever species of labor is productive of utility, whether in matter or not, is *productive;* unproductive labor only exists when more is exerted than is necessary.

6. *Exchangeable value* exists from a capacity of being appropriated, the possession of utility and a limited supply. (See No. 2.) It is determined in every instance by the relation which the supply of an article or commodity has to the demand for it. By the *supply* of an article is meant the quantity which comes into the possession of the sellers, and is offered by them for sale during a given portion of time. By this is not meant the stock which they have on hand, which is generally less as the supply is augmented.

By *demand* is not meant desire to possess; it is rather estimated by the number of offers to purchase made in a given time, at any given rate.

If the demand for a commodity remain the same, and the supply be increased or the demand be diminished and supply remain the same, *prices will fall.* If supply be diminished and demand the same, or supply the same and demand increased, prices will rise. An expected variation in supply or demand will affect the present price. The degree of this variation will depend upon the nature of the commodity. These causes of "price" sometimes neutralize each other. But there are other circumstances which affect the prices of commodities; they will vary also on account of any change in the supply or demand of the money for which they are exchanged. But it is evident that all commodities will feel the effects of this "change" in the same degree, consequently their "exchangeable value," when compared *with each other*, will not be influenced by it. An increased demand for money will cause a fall of prices; an increased supply a rise of prices and *vice versa.* The exchangeable valve of money, like everything else, is determined by relation of supply and demand with respect to itself and in respect to the commodity for which it is exchanged. The exchangeable value of immaterial products is estimated in the same manner; it is resolved into the compensation or wages of labor. The prices or exchangeable values of all things material or immaterial, meaning labor by the latter term, are determined *then* in every instance by the relation subsisting between supply and *demand.*

7. *Prices* fluctuate with a fixed law; there is a mean or average price which is invariable, while the actual or market price oscillates about it, and has a constant tendency to become equal to it. *Wages* would be the same in all employments if the circumstances under which *labor* is exerted were in every respect the same. The causes of variation are, first, the agreeableness or disagreeableness of the occupation, including honor or disgrace, healthiness or unhealthiness, chances of success, &c. Second, the qualifications natural or acquired which they demand. In every employment, there is a natural or necessary rate of wages about which the others oscillate. The wages of labor will be at a certain fixed rate in each occupation, while the daily, weekly, or monthly wages of the laborer may admit of a certain degree of diversity, depending upon considerations above stated; all this goes on the supposition that individuals in seeking for employment are actuated by interested motives, and that full scope is given to the operation of supply and demand; where these do not influence, as in the case of Christian missionaries, public officers, and monopoly trade establishments,

the rule will not hold good. Again, our reasoning will apply only to the same part of the country. The wages of labor will vary much in different sections, and not be equalized because of the difficulties attending a change of residence. But an emigration of laborers will take place to some extent.

8. If the circumstances of advantage and disadvantage were similar (profits excepted) in every branch of industry, it would follow that a *general rate of profits* would exist, also a *natural* or *necessary rate* of prices; as in the analogous case of wages, (No. 7,) variations may occur from the difficulty of transferring capital.

The possibility of transferring capital will vary in different branches of industry; in some it will be with facility, in others only by a gradual transfer, by declining to repair the wear and tear, &c.; there is no loss in transfer of capital, it is rather to avoid loss that it is made, but a loss took place before the transfer. Generally, fixed capital is transferred with difficulty, circulating not. The exception to the rule that there will be a natural price is found where the supply cannot be increased, as old books, statues, rare wines, &c. If the circumstances of advantage or disadvantage which were supposed equal should vary in different employments, profits will vary too. In consequence of the advantages conferred always by landed property, it may pay less than the ordinary rate and still be desirable. But though profits vary in different employments, they will tend to be at such a rate in each as will offer no inducement for transferring capital; this will be the *ordinary rate of profits*. Let an individual dispose of his capital as he will, he cannot expect eventually more than the ordinary profits.

Where a thing replaces the capital consumed in its production, and yields in addition the ordinary profits, it is said to *repay the cost of production*.

9. In the case of *monopoly* there is an exception to the above rules; the monopolists will *understock* the market and receive more than *ordinary profits;* they will raise the price of necessaries rather than luxuries, though the Dutch diminished the supply of the latter to obtain a higher price with success. A patent right operates as a monopoly to some extent; and those who are first known in a market receive an advantage, partaking in a degree of the nature of a monopoly.

10. RENT, in the politico-economical sense of the word, is *profit beyond the ordinary rate of profit*. It is yielded in different branches of industry, wherever one portion of capital is invested under more favorable circumstances than another,

as in the case of peculiar productiveness of soil, in agriculture, favorable situation with respect to markets, &c. But the capital last applied, being debarred of these advantages, yields only the *ordinary profit*, as after all the best lands are taken up. This last capital is applied most disadvantageously, or under the most unfavorable circumstances, except in those cases where there was a mistake in the application of former capital, or where former situations have deteriorated. The "*cost of production*," which determines "*price*," is the cost of producing under the most *disadvantageous* circumstances. Landlords are the receivers of rent; they receive it not as a compensation for expenditures on the soil, but as a compensation for the use of the natural powers of the soil. As Dr. Brantly quotes from Smith, they reap where they have not sown. It is difficult to distinguish what is rent from what is profits; the produce of labor comes first into the hands of the capitalist, and is by him distributed to landlords, farmers, and laborers, though one individual may be at the same time two or all of these. The land which pays rent will have a greater exchangeable value than the capital expended upon it. Rent is, as well as profit, the product of labor.

11. The cost of production may be separated into the two following elements: The capital consumed in producing a commodity, and the ordinary profits on the whole of the capital employed. Hence, prices will fall either when the capital is consumed, or when the amount of profit received is diminished. Thus the following circumstances will be attended with a fall of prices: The employment of a less amount of capital; the substitution of fixed for circulating capital; the shortening of the period employed in production; a fall of wages; a fall of profits. It is not possible for wages and profits to rise together—on the contrary, as wages fall, profits must of necessity rise, and *vice versa*. In general it will be true that prices will suffer proportionally more alteration from a given change in the rate of wages, and less alteration from the corresponding change in the rate of profits, where the circulating predominates over the fixed capital.

It is an error to attribute the low price of British goods to the lowness of wages—it is due to the lowness of profits and wages taken together. If wages in Britain were to rise, the prices of those commodities which are the product of fixed capital would fall.

The price or exchangeable value of an article cannot be regarded as determined in every instance by the quantity of

labor employed from first to last in producing it. There is another element, to wit: The TIME employed from the application of the several portions of labor, until the production of it in its complete state.

When the "*time*" of which we have been speaking is said to determine a certain amount of profits on the capital employed, or what is at present the same thing, the wages of labor, these profits are not in *exact* proportion to the time. Whatever may be the amount of profits for a year, if received at the end of that time, somewhat less than half as much will be proper for six months. Generally, improvements in the arts result from a greater productiveness of *labor*.

12. *In the progress of society*, from the nature of the land, that is, from the necessity of taking new land into cultivation, the whole amount of wealth will be proportionally diminished; that is, proportionally to the amount of labor applied. The exchangeable value of agricultural products will rise in reference to all others. Rents will rise and with them the value of lands, rise because of the new land taken into cultivation, and the augmented value of agricultural products consequent upon it. Also, if wages remain the same, profits will fall, because of the rise of rent. There will be a less rapid accumulation of capital, since the lower the rate of profits the less inducement to save, and the rate at which *population* and *wealth* increase must, in consequence, be continually retarded; these consequences are modified, and, in some cases, counteracted by improvements in the arts, or of the productiveness of labor, and the removal of *restrictions* upon industry; but as these improvements take place less rapidly in agriculture than in other arts, the relative value of agricultural products will receive another increment. Improvements in agriculture will cause *rents* to fall, since they tend to obliterate the distinctions between land; in other arts they will cause *rents* to rise, because the demand for agricultural products will be increased and inferior land cultivated. Improvement in the arts will produce a more rapid augmentation of capital. If the same rate of wages be paid on the *progress* of society, capital and population may increase or diminish together at the same accelerated or same retarded rate. *The rate of wages* is dependent on the relation which the capital of a country bears to the number of the people, therefore, population should be made a matter for consideration. *How* is population ever checked? In two ways: One preventive and the other positive. Among the former, *late marriages* and *vicious* habits. Among the latter, wars, famine, pestilence, &c. But why do late marriages take place? Because of the difficulty of pro-

curing the means of support; and this operates on all classes in a greater or a less degree. Instance, Prussia. Hence, every rise of wages, unaccompanied by improved habits, augment the number of marriages.

13. The difficulty of procuring the *means of support* is a different proposition from that which asserts population to be checked by the difficulty of procuring *subsistence*.

The deduction from the former proposition is, that *population* is ever pressing upon the means of support, and has a tendency to increase more rapidly.

The word *tendency*, used in a mathematical sense, it is greatest not when population increases *most rapidly*, but, on the contrary, when this increase is *slowest*.

This tendency is the principle of population, whose strength can easily be estimated by comparing the United States, with a population doubling itself in 25 years, with other countries where population is stationary, or even declining.

The average, necessary, or natural rate of wages in any country must always remain the same, so long as the *habits* of the people in relation to marriage continue the same. The rate of wages is determined then by the HABITS of the people, in the sense that we have used the word. Improve the habits and you improve the *rate*. But how can this be done? By enlarging the desires of the great body of the people, and to promote among them the growth of habits of foresight. And how can this latter be done? By expanding the understandings by EDUCATION, intellectual, moral, religious; by improvements in the arts, which both increase the number of a people and enlarge their command over the means of support; and finally, savings banks, "benefit societies," and admission of the people as soon as they are sufficiently enlightened to a participation in political affairs.

14. Emigration and immigration. An increase of population is not a criterion of national prosperity, however desirable it may be in a rude stage of society for the natural defence. Emigration is profitable when the emigrants take with them less capital than would employ them at home. It is an evil when the most valued citizens leave, as in France after the "Edict of Nantes" was revoked. Immigration is profitable when it brings "skillful" emigrants and capital to employ them; but in such a country as the United States "laborers" alone are profitable, being employed in the western wilderness. It is profitable when a greater proportionate number of able bodied men are introduced. In the progress of population it is exceedingly desirable that, however rapidly capital be augmenting, the *rate* at which it augments should not be a diminishing one.

15. The condition of a people will be better when the necessaries of life are dear and the luxuries cheap than in the opposite case. Instance, Ireland. An extraordinary mortality among a people will cause a permanent rise of wages; but an exception to this is found in wars, which expend unproductively vast resources, and take away the most productive portion of the community. An improvement in medicine has a different effect from "enlarged mortality." The "*monks*," by not marrying, made room for others to do so. If they were "*unproductive laborers*" they were a disadvantage to the world, and only for this reason.

16. MONEY.—If the circulating medium of the world consisted entirely of the precious metals, if the cost of transportation was nothing, prices everywhere would be the same. An addition to the circulating medium at a particular place will cause a local rise of prices, exportation of money and *importation* of commodities other than money, and this process will be continued until prices are everywhere equal again, being a little greater than they were before the process.

But this state of things will not last, less capital will be employed in mining, gold and silver will rise and prices fall to their former level. The value of gold and silver, like every other commodity, is determined by the cost of production. If the precious metals be coined the same conclusions may be drawn.

Coined money will have an advantage in exchange over bullion in proportion to the *confidence* in the accuracy of its stamp. A government cannot enhance the value of a coin by charging a higher seigniorage than will cover the cost of coining. The efficacy of a circulating medium is increased exactly in proportion as the *circulation* is quickened. If the demand for money be diminished the circulation will be quickened. If the demand be increased it will be rendered slower. The expense of transportation, using this term most comprehensively, is the only reason why the prices of things are not, in fact, everywhere the same, so long at least as commerce is free from restrictions.

When it is said that prices depend everywhere on the cost of *producing* the precious metals, the term *production* is used in its *broad* as well as *strict* sense. That is, when the metals are produced in the country, or the commodities are produced for which they are exchanged.

17. *Bank notes.*—Suppose all paper money to have this form, and that the circulation of any section of country be increased by their issue, the effect will be a local rise of prices, exportation of specie, importation of other commodities, until

prices everywhere are equalized; a less production of specie will prevent prices from being higher than they were before the "*issue*," but they will be higher for another reason. Paper will save the wear and tear of specie; less of it will be required, produced; mining will be carried on under less "*disadvantage*;" the prices of the metals will fall equivalent to a rise of prices, though slight. Paper money *may* be exported as well as specie, and will have the same effect on prices. To increase the circulation $100,000, $150,000 in notes must be issued if $50,000 in specie was extracted from circulation as a base.

18. Specie and bank notes do not comprise the *circulation*. Bills of exchange, drafts, transfers in the column of a ledger, bank checks, public security, representatives of property, and such like enter largely into this *circulation*, and have similar effects upon prices as "*bank paper*" and specie.

19. The *value* of the circulating medium remains always the same, whatever be the augmentation or diminution to which it has been subjected, consequently, it does not matter whether the "circulating medium" be great or small. A diminution or augmentation in one country will be equally distributed throughout the world.

20. There are three kinds of banks, discount, deposite, and circulation. One bank may partake of the character of all these, as in the United States. There will be no inducement for a bank to issue its own notes unless to a greater extent than it has specie in its vaults. How comes it then that a bank maintains its credit, when every one knows that it could not redeem all of its notes with specie were they presented at the same moment? 1st. Because it has in its vaults, in addition to specie, the promissory notes of individuals to an amount greater than the amount of its own notes. 2d. Because these promissory notes are for short times. 3d. Because the bank sometimes possesses property exclusive of its capital; the term *capital* strictly being applied only to the *specie* in vault. But with extended circulation its condition will gradually be *impaired*, and a *run* will finally be made upon it. Banks have the power of expelling all specie from circulation, and by this means they will be enabled to guard against a "run" after their issues have been expanded; and when they have done this they will push their issues to the limits of safety, which limits experience only can define. Now suppose all this to have been done, and a particular bank attempts to enlarge its circulation beyond its usual proportion, its notes will enter other markets and lose their character by being seen so far from home (thus importing an

unusual augmentation ;) other banks will receive them either below par and thus injure them, or demand the specie for them, so that it will be brought back to the condition it was in before the *experiment*.

The banks thus mutually check each other, but this may be removed by a combination of them ; yet, in consequence of the independent banks and the money markets abroad, to no extent. After a certain amount of capital has been invested in banking, strictly speaking, no more can be so invested, and new banks will transact business at the expense of the old ones. It is impossible that the circulating medium, and, of course, prices, shall go on continually augmenting.

21. There are three *advantages* in the bank note system ; convenience, less production of metals, and, of course, augmented production of other commodities ; exportation of specie dispensed with, and, of course, importation of other articles. Others have been assigned, but illegitimate, such as cheapness, creation of capital, creation of credit.

22. The disadvantages are : alternate expansions and contractions, with its effect upon prices and upon debtors and creditors. Refusal to discount notes at particular times, with its effect upon merchants and all with whom they are connected. The power which the directors and their friends have to speculated, by means of these alternations, upon the people, a kind of swindling. Their partiality to particular individuals in allowing them money to carry on this speculation. Their effect in engendering a spirit of speculation. Lastly, the greater effect upon the circulating medium from a demand for a given amount of specie, when that medium consists of paper, than when it consists of specie entirely. Suppose the paper in circulation in South Carolina be $1,000,000, and specie in vault $250,000. Now, let there be a demand for $100,000 in specie for exportation, the $1,000,000 paper will be reduced to $600,000 if the same degree of safety be desired. But an exclusive specie circulation is impossible, therefore this disadvantage of paper circulation is not so great as we have supposed.

23. Another evil of banks is the "special legislation" which they cause and the possibility of their opperating directly or indirectly in corrupting the members. These members also have privileges in purchasing the stock.

The large profits that are made in banking is not a gain of the stockholders at the expense of the community. They are rather a measure of the benefit conferred on the country by the substitution of a bank note for a specie circulation, as this benefit has been shown in 21. Ought this not to be a

"national gain?" Governments have thought so and exacted a "bonus" from the banks, and they have sometimes turned bankers themselves; but this is a great evil, as it increases the power of the legislators. But were they to exact a "bonus" just large enough to leave the stockholders the ordinary interest of their money, it is evident that all evils would be remedied.

24. The arguments for having many banks are, first, the more equal diffusion of the advantages of the system; second, their mutual checks upon each other; third, the unequal influence of *wealthy monied institutions* would be diminished. The disadvantages are, first, the danger of improper management from want of skill; second, a greater tendency to expanded circulation; third, their being introduced in places where they are not needed, and the effect upon farmers in inducing speculation; fourth, the greater probability of counterfeiting. A national bank would prove an evil from being "*a wealthy monied institution.*" Private banking would be an evil, since irresponsible persons would issue notes and the community be imposed upon.

25. An exclusive specie circulation would be preferable to the present monetary system of the United States, but a circulation consisting in part of specie and in part of bank notes would be preferable to all called a *mixed currency*.

26. The best circulating medium for the United States, one that will in no degree be liable to alternations more than a specie one, which will obviate all the evils of banking, and add but very little to executive patronage, is the sub-treasury scheme. Let the Secretary of the Treasury issue treasury notes, on which no interest shall be paid, in payment of the public creditor, whenever they shall be preferred by the latter to specie, and let them be received for taxes when the tax payer shall prefer. All the discretion rests with the public creditor and debtor. The amount of issues to be determined by the wants of the merchants. The advantage of exporting specie will be lost by this system, since it will be locked up in the vaults of the treasury, though a portion of it might be expended by the government in the payment of national debt, &c., &c.

27. The present banking system should be abrogated, which may be accomplished slowly in three ways: The legislature might prohibit the issues of notes of the smallest denomination, and next those of a rank or grade higher, and so on, until all bank notes are driven out of circulation; or, secondly, the legislature might decline incorporating new banks or renewing charters; or, third, it may exact a bonus high enough to reduce banks to ordinary profit. If either

of these be done, there will remain banks of discount and deposite, which will pay a less interest on the amount deposited than it charges on discount, the difference being its profits. But this can never be brought about until the States yield to general government alone the right of incorporating banks.

28. Suspension of specie payments in England, 1797 to 1822; in United States from 1814 to 1817 and in 1837. But bank notes did not fall as low as was expected. Yet at such a time the banks have no check upon their issues unless compelled to resume. An appreciation in specie may account in part for a depreciation of paper. To issue notes representing land rather than specie is objectionable, because a limit could not be prescribed to the issues, and because land varies in value more than specie.

29. Governments have debased the currency by fixing a higher value than the worth of a coin, and by issuing bills of credit. Both highly injurious.

30. In a free system of banking, government ought not to limit the interest on money, but with our banking system it is well to guard against monopoly.

31. Governments have shown particular favor to some branches of industry at the expense of others, on the supposition that they only were productive, or at all events more productive than the rest. Agriculture was the only branch, according to Quesnay and others, which was productive, operating through the "powers of nature," which was truly the only producer in the case. But this is not true; in all branches the powers of nature co-operate. Witness steam in commerce and manufactures.

But agriculture is said to yield rent, so do commerce and manufactures sometimes; but rent is not a criterion of profit, for if all the land was made of the same quality there would be no rent, so agriculture will yield no rent when it is more profitable.

32. Commerce is properly applied to the whole series of acts by means of which the products of the farmer or manufacturer are transported from the places of their production and distributed among the individuals by whom they are destined to be consumed. The definition that it is the exchange of equivalent commodities is too much restricted. It is productive because it adds to exchangeable value. If not productive, there should be no diminished production if it ceased. But there would be. Speculation is sometimes productive, when it will serve to distribute over a certain period the actual supply of any article in the most advantageous

manner without any counterbalancing public disadvantage, and this will be when there are no contractions and expansions by the banks. Capital employed abroad may sometimes be more profitable to a country than capital employed at home. The balance of trade has been a fruitful source of error. Governments having supposed that a country could only prosper when there was an influx of specie, or when the exports exceed the imports; the contrary, however, is true principle. Imports should embrace the value of exports and the profits on them. But, if there should be a "balance of trade" in favor of a country, it does not follow that there would be an influx of specie. If exports exceed imports, capital will generally have emigrated. Exports and imports are estimated in the country from which the former went and in which the latter came. To protect the domestic producer, a tariff should be imposed, greater than the difference between the cost of the domestic and foreign article. If a tariff be imposed for revenue it will afford no protection and *vice versa*.

34. *The tariff question.*—The low price of foreign goods is a clear gain to a country, which would be lost by imposing a duty for the protection of home manufactures of higher cost. A tariff will diminish imports and, of course, exports.

It is impossible that *all things* should be obtained cheaper abroad than at home, for any time; specie will be sent from the country, prices will fall as low and even lower than the prices of foreign articles, and they will no longer be imported.

If foreign countries impose restriction, thus injuring themselves as well as us, there is no reason why we should do the same thing, unless we would be guilty of an absurdity. But suppose foreign duties be so high as to prohibit any other import from us but specie, could they drain our country of specie? No; prices will fall as specie leaves the country, until it will be unprofitable to send more.

The *prosperity* of England is no argument in favor of her protective system. When we consider the misery there, we might ask, Would there not be *more* prosperity were all restrictions removed? Holland and Switzerland flourished without them. Protection never creates *capital*—it can only cause it to be transferred. But there was an advantage in the protection afforded by Edward the Third to manufactures—it produced an opulent middle class between lords and vassals, necessary for the attainment of liberty; but this can have no weight in the United States. Ought not a tariff to be imposed until our country has attained the neces-

sary skill to produce as cheap as England? Who shall determine whether we ever can produce as cheap? It is a difficult question; and the legislature, urged by influential citizens, will find reason for continually imposing duties.

The tariff regulations have injured some portions of this country for the benefit of others—though the ultimate injury to the whole country is indisputable. The north, as well as the south, is injured, though in a less degree.

35. But a *sudden* transition from the restrictive to the free trade system would cause great distress in the country, by breaking up branches of industry; any such change should be gradual. The government is not bound to continue protection to the manufactures it has created; if it was, it must necessarily prohibit all improvement in the arts, for such improvements injure those whom the government formerly fostered. The tariff system has not benefitted the country, by giving employment to women and children, since the same amount of wages is distributed among a greater number.

36. A BOUNTY is precisely the same in its effects as a tariff.

37. The advocates of free trade would submit to a modification of it. Since it is important to confer *stability* on the employment of capital, and since, in case of war, under the free trade system, this *stability* would be disturbed at its completion, as it was 1815. A duty of five or ten per cent. might be imposed, provided such duty would afford protection, and this duty would be a tax, paid by the country, to obtain a permanency in the investments of capital. A higher duty, such as 50 and 100 per cent., can only be considered as a legislative absurdity, to which all the evils which might possibly accrue from free trade are preferable.

38. If a duty on imports be imposed, the best one is a duty *ad valorem* on every article imported; this would guard against high protection and "*log rolling*," but if protection be afforded to one more than another, those branches which favor the national defence should be preferred. If governments abroad should afford bounties to their manufactures, *ours* would be undersold and ruined; it would be expedient to afford them a bounty, too, gradually diminishing it from time to time, so as to guard effectually against "*the evils of change.*"

Were the British to repeal the corn laws, and were corn to the amount of ten millions (which is improbable) exported from this country, our imports would be increased, which would interfere with domestic manufacturers, and they would require greater protection.

39. Two arguments have been advanced in favor of the *restrictive system*: 1st. It developes a greater intellectual and physical power, by increasing the number of occupations; 2d. It brings "*the many*" together, which is favorable to the advancement of education, &c.

Three against it: 1st. Manufactures will have more capital applied than is necessary; 2d. The fluctuations in its prices are more wavering, and laborers oftener thrown out of employment; 3d. It causes a permanently augmented circulating medium; and there may be a fourth, That prosperity, which is the least dependent on artificial regulation, will be most stable and most desirable.

40. The reason why the tariffs of 1824–'28 were required was that too much capital had been employed in manufactures, and prices fell; some of the richer manufacturers were opposed to these tariffs. A duty on one article encourages the importation of others that are free. So there are two reasons why the "revenue" has increased with increased protection duties: Higher duties exacted on those imported; and more of them imported by reason of the protection afforded others.

Only such manufacturers are benefitted by protective duties as those whose sites yield rent; others get the ordinary profit, if they do not get less.

The restrictive system has been called the "American system," because it encourages American industry; but the fact of the case is quite the reverse: "free trade" is more properly the "American system."

Mr. McDuffie's "40-bale theory" is a bad one; the producers *never* pay the tax—consequently, the southern planters were not, as he supposed, the only ones who suffered by the tariff. If they suffered, it was as consumers; if more than others, because a diminished exportation would cause a transfer of capital; but then it must be remembered a market would be opened at home *for their cotton*.

COMMERCE, STATISTICS, ETC.—SUBJECTS OF UNIVERSITY INSTRUCTION.

In a late report of the commencement of the collegiate department of the University of Louisiana, at New Orleans, it is stated:

"This being the first presentation of the University prizes, much interest was elicited regarding them. While they reflect high honors upon the liberal donors, the standard of scholarship in the University has been highly elevated thereby.

"The lamented Touro and the liberal merchant Glendy Burke have set a noble example to the men of wealth in Louisiana by extending appropriate and valuable encouragement to a home institution, where our sons will not imbibe doctrines adverse to the institutions of our southern clime. The Hon. Maunsel White stands among the first of liberal donors to our State University, having

endowed a commercial professorship by a donation of fifty-six lots of land, situated in this city. The board are devising steps to render this endowment of immediate value to our commercial community. We are pleased to notice that the university is giving unequivocal testimony to the energy of the new board of administrators, who seem constant in their efforts to give us an institution second to none in the Union."

No one can hail the determination of the board with regard to the university, and especially to the commercial chair, with higher gratification than the editor of this Review; and the mention of the subject suggests some points bearing upon its particular history, which may not inappropriately be referred to.

In July, 1847, we prepared an article for the pages of the Review entitled "Commerce and Agriculture in Universities," (vol. III, p. 502,) basing ourself upon the recommendation of the Southern Commercial Convention of 1838 "to introduce commercial education among our youth." In this article it was remarked:

"Statistical and commercial information, or such as is necessary in the conduct of the mercantile operations of a country, have been least fortunate of all in attracting the regard of scholastic institutions. As separate and distinct branches of university instruction, they have until very lately scarce had a place, and even now but to a limited extent. We have educated every class of the community, most of them specially, except our merchants, and these we leave to glean what they can upon the mart or on the bourse, without any of that light and instruction which, previously imparted, would cause them to adorn their places and advance their country. Can it be wondered, then, that the mercantile classes yield to the nation so few influential and leading citizens, men of the stamp of Roscoe or Ricardo? Can it be wondered that trade is so often stigmatized a 'gainful craft,' instead of winning, as it deserves, the appellation of a liberal and civilizing pursuit?"

"It will be hardly necessary for us to dwell much at length upon the importance of statistical knowledge, as a study, although, indeed, we do sometimes hear it idly depreciated. Abstract arithmetic is as true as the laws of nature, and in its application to matters of fact, to the operations of men, it is as certain and reliable, if not more so, than any of this kind of knowledge."

"A State University being now in the course of organization in Louisiana, it seemed but fitting that we should bespeak, on the part of the great commercial interests of New Orleans and our country, a share in its results more special than has hitherto been contemplated. The university is to be located in the city of New Orleans, a site destined, in the

apprehension of the calmest reasoner, to be one of the greatest, if not the greatest, commercially, in the world. It is peculiarly fitting that such a city, which lives and has its being by commerce, whose merchants are almost without number, prospering and accumulating wealth beyond precedent; it is peculiarly fitting that such a city, we say, should lead the way in establishing what our whole Union requires, *a department of collegiate and university education, addressed entirely to the commercial classes.* Could any department be conceived more important, or confer more inestimable advantages?"

We shall now proceed to make a brief exposition of the duties of the professorship, its organization, &c., and give the outline of its labors. In this we are without guide from any other quarter, but give our own views, the result of long and continued reflection upon the subject.

PROFESSORSHIP OF PUBLIC ECONOMY, COMMERCE, AND STATISTICS.

Embracing the Theoretic and Practical Departments.

I. THEORETIC.—Origin of Society and Government; Theory, Forms, and Ends of Government; Rights, Duties, and Relations of Governments; Sources of National Wealth and Progress, and Causes of National Decline; Production, Distribution, and Consumption of Wealth, with the Laws appertaining thereto.

II. THE PRACTICAL AND STATISTICAL.—Statistics of Population and Wealth in their application to *Commerce, Agriculture,* and *Manufactures.*

1. History and Progress of COMMERCE, its Principles and Laws; Home and Foreign Commerce; Tariffs, Treaties, Life Insurance, Roads, Canals, Shipping, and Revenue, Systems of Reciprocity; Balances of Trade; Mercantile and Navigation Systems; Colonies and Colonial Systems; Banks, Finances, Accounts, Transportation, Book-keeping, Principles of Merchant Law; Commerce of Nations, Ancient and Modern; Geography of Commerce, Commodities of Commerce; Literature of Commerce, &c., &c.

2. Progress and Results of AGRICULTURAL SCIENCE; Principles of Agriculture; Comparative Condition of Agricultural, Commercial, and Manufacturing Communities; Statistics of Agriculture, &c.

3. Origin and Progress of the MANUFACTURING SYSTEM; its Relation to the other Pursuits; Invention and Machinery in Manufactures; Condition of the Manufacturing Classes; Statistics of Manufactures, &c.

Text books for the course, among others:

Locke's Essays on Government; Lieber's Political Ethics and Hermeneutics; Montesquieu's Spirit of Laws; Smith's Wealth of Nations; McCulloch's Commercial and Geographical Dictionary; Say's Political Economy; Vethake's Political Economy; Carey on Wealth; Stephens' Progress of Discovery and Maritime Commerce; Heeren's Commercial Researches; Vincent's Commerce of the Ancients; McGregor's Commercial Legislation; Annual Reports of American and Contemporary Governments.

"It should be required from the professorship to prepare and deliver twelve public lectures each year, free to every one, upon subjects determined in its organization. For example, upon the '*Sources of National Wealth and Decline;*' on the '*History and Progress of Commerce;*' on the '*Foreign Commercial Relations of the United States, including our Treaties;*' upon '*Finance;*' on the '*Results of Agriculture and the Advancement of Agricultural Classes;*' on '*Manufactures;*' the

'*Science of Statistics*;' the '*Geography of Commerce*;' the '*Commodities of Commerce*;' the '*Literature of Commerce*,' &c., &c. The lectures to be of a practical character, and perhaps to be published eventually, under the auspices of the University, as one of its text-books, and as a work to be used and consulted in every part of the Union. Such a volume, prepared with all the light afforded in the libraries and collections of the university, would be complete."

In January, 1848, the Hon. Maunsel White, an esteemed and wealthy merchant of New Orleans, whose experiences and connexions run back anterior to the American history of the city, entertaining the subject as one of wide public interest, and calculated to elevate the profession to which he was so much indebted, addressed a letter to the board of administrators of the university, (being himself a member,) announcing his determination to secure an endowment,* &c.

To use his own language, (Review, vol. V, p. 240:)

"The object of this movement is to secure an endowment for a *Chair of Commerce, Public Economy and Statistics*, in the University. These matters have not, so far as I am informed, been made the subject of especial study in any of the institutions of this country or of Europe. The States of the German Zoll Verein, indeed, as we learn by the foreign mail of to day, constitute an exception, as they *intend* a '*Commercial Univeritsy*,' for merchants, manufacturers, and commercial lawyers.

"It will be the proud satisfaction of *New Orleans* to have taken the lead of al other commercial cities of the world in this matter, and it may be confidently affirmed that this important department of knowledge could be prosecuted with higher success and efficiency in no other city. To her commerce is the all and all of prosperity, and she the spontaneous, youthful, yet vigorous offspring.

"A plan for the above professorship has been drawn out, at my request, by Mr. De Bow, a synopsis of which is annexed."

The professorship having been established by the board accepting the liberal donation of Colonel White, that body proceeded at once to the election of a professor, and selected the editor of the Review, without his knowledge or solicitation, but upon the nomination of the founder of the chair.

Gratified by such a mark of favor, he entered upon the preparation of a course of twenty-four lectures, which were completed during the summer of 1848, and announced in a public programme for the coming winter. The introductory lecture of the course was delivered in the hall of the old State House and printed in the papers of the day. The sudden appearance of epidemic cholera in New Orleans, and the ravages of that terrible scourge, (who can ever forget them,) interrupted the lectures at this point, and broke up the class. As the programme of this course may, perhaps, be of some use to those who are laboring in similar fields, it is given here entire. It

* Col. White had, twelve months before, advocated this chair in a letter to the editor of the Review, published in the March No., 1847.

is especially recommended to the Young Mens' Commercial Associations in the several cities when sketching their course of winter lectures.

Programme of a course of lectures.

LECTURE I.—*Introductory and Public.—Spirit of Ancient and Modern Education;* doctrine of practical results; diffusion of knowledge; the practical sciences; relative educational advantages at the north and south; in New Orleans; character of the University of Louisiana; commercial education; outlines of the history of political economy; commerce and statistics; the mercantile character, etc., etc.

DEPARTMENT OF POLITICAL ECONOMY.

LECTURE II.—*Rise and Progress of the Science of Political Economy*, from its origin to the publication of the *Wealth of Nations*, and since that period.

LECTURE III.—*Productive Powers of Labor*, and the order of distributing its produce throughout society; division of labor; origin and use of money; real and nominal prices of commodities; wages, stock, rent of lands, etc., etc.

LECTURE IV.—*Nature, Accumulation, and Employment of Stock;* accumulation of capital; productive and unproductive labor; interest; employment of capital, etc.

LECTURE V.—*Progress of Opulence in different Nations;* ancient and modern agriculture; rise and progress of cities, etc.

LECTURE VI.—*The Mercantile Systems;* restraints upon importation; drawback; bounties; treaties of commerce; colonies, etc., etc. Agricultural systems.

LECTURE VII.—*Revenue;* varieties of taxes; subjects of taxation; imposts; how taxes fall? who pays them? proper sources of revenue; what the State should do, etc.

LECTURE VIII.—*Sources of Public Wealth;* what is public wealth? how can the government promote it? constant and perplexed legislation; the natural state of things; growth of the various branches of industry; influence of free governments, etc.

LECTURE IX.—*Growth of the United States*, in territory, colonization, and formation of States; present population of the Union; the future of the United States.

DEPARTMENT OF COMMERCE.

LECTURE X.—*Ancient Commerce;* rise and progress of commerce, and the commercial nations of antiquity; principles of ancient commerce.

LECTURE XI.—*Commerce* of the world from the first to the fifth century after the Christian era; character of the fifth century.

LECTURE XII.—*Commerce* from the fifth to the tenth century; early French, Spanish, Danish, and Saxon commerce.

LECTURE XIII.—*Commerce* from the tenth to the fifteenth century; Venice, Genoa, Pisa; the Crusades; chivalry; the early English commerce; discovery of America.

LECTURE XIV.—*Commerce*, from the fifteenth to the nineteenth century; colonization of the New World; growth of European commerce; rise of the commercial classes, etc., etc.

LECTURE XV.—*The Present Commercial World*, embracing a review of the character, position, advantages, and comparative rank of all nations in regard to commerce, etc.

LECTURE XVI.—*Navigation* and inter-communication, shipping, canals, railroads, and other transportation, etc.

LECTURE XVII.—*Progress of American Commerce;* its extent; the nations with which we trade; imports and exports from and to all nations; commercial legislation; American cities.

LECTURE XVIII.—*Treaties and Tariffs;* such general principles of international and municipal law as most interest and relate to commerce; commercial codes.

LECTURE XIX.—*Banks* and finances, exchanges, public debt, etc.

AGRICULTURE AND MANUFACTURES.

LECTURE XX.—*Origin and Progress of Agriculture;* the agricultural classes; agricultural products; comparative agricultural advantages of different nations; American agriculture.

LECTURE XXI.—*Origin and Progress of Manufactures;* the manufacturing classes; American manufactures and their growth; advantages of manufactures, and their extension throughout the southern and western States of the Union.

DEPARTMENT OF STATISTICS.

LECTURE XXII.—*The Science of Statistics;* its history; its advantages in sound legislation, and in contributing to the improvement of society.

LECTURE XXIII.—*Same subject continued* in connexion with national censuses and the proper understanding of the condition of the people in all countries; applications of political arithmetic.

PUBLIC LECTURE.—CONCLUSION.

LECTURE XXIV.—*Population;* populousness of various countries; laws of population; whether ever too rapid; its advances in the United States since its discovery; prospect of future population of the United States; does population press upon the means of support? etc., etc.

If nothing has been done for several years in the professorship, there are reasons satisfactory enough. The literary branches of the university, established under the sanction of the Constitution, and promising at its inception to be a favorite of the legislature, came all at once to be placed under its ban. The building intended for the use of these branches was commenced, but remains to the present moment unfinished and untenantable. The action of the administration grew slow and constantly interrupted. The endowment was not immediately available upon terms that would be permanently advantageous to the university. *In short,* the *circumstances of the university were not auspicious for carrying out the purposes of the professorship.* We are glad to hear that they are improving. The new board is said to be a practical and energetic one. It will be in their power to do much for Louisiana and New Orleans. They will receive the right hand of all good men.

We close with two extracts more from our earlier papers upon this subject:

"Is there nothing in the nature and character of mercantile pursuits worthy of illustration by science and letters, and capable of being advanced by the deductions of philosophy and the results of enlightened experience? Is the merchant *born,* or is he *made* by the slow and patient operations of thought, recognizing the most liberal, enlarged, and enlightened views? The mere trader and peddler are *born,* and natural cunning and cupidity may urge them into opulence, without the intervention of any teachings, or a single liberal sentiment. It was this peddler enterprise which made the proud Earl Warwick say: 'I like not, man, the trader spirit, the spirit that cringes and higgles and splits straws for *pence,* and roasts eggs by other men's blazing rafters.' The craven spirit of such men is well rebuked by Burke, who claims their ledgers as their bibles,

their *iron chests* as their altars, and their *money* as their God! The true merchant scorns the association of such men. He looks for his bright exemplars to the Roscoes and Medicis of the world, and cherishes that high purpose, that noble resolve, those liberal and enlightened sentiments, which make the merchant in the most unlimited sense the man, the citizen, the patriot, the public benefactor.

" 'Undimm'd the *man* should thro' the trader shine,
And show the soul unlabel'd by his craft.'

"In New Orleans, too—a city more strictly *commercial*, perhaps, than any other upon the face of the earth, which has sprung up, as it were, among the marshes of the Mississippi, an infant Hercules, feeding, growing, and enlarging upon TRADE, and incapable of a single breath without the workings of its great arteries, stretching out its broad arms and drawing in the wealth, resources, and power of an empire, challenging in its march to greatness, and threatening to outstrip every other commercial mart upon the continent—in New Orleans is the position of the merchant classes deserving of highest consideration."

RED RIVER RAFT.

THE GREAT RAFT OF THE RED RIVER AND ITS REMOVAL.—As this subject is not generally known and understood, I ask a place in your Review for it, and though not very accurate it may be sufficiently so for general information. How and when it first originated, what have been its consequences and what they may reasonably be expected to be on the removal, has in it importance enough to justify this attempt at information. The raft is an accumulation of trees, logs, and drift, extending over the surface of the river from bank to bank, and for miles in extent, so close and compact as to be walked over without wetting the feet. Broom-straw, willow, and other small bushes are growing out of the rich alluvial earth that cover the logs, so that it presents the appearance of an old worn-out field that has been abandoned to grow up again. The current, if any under so much impediment, is barely perceptible. Such a mass of decayed and decaying wood is malarious in the extreme, and its steady upward march at about one and a half miles a year is driving a scanty population before it.

At what time it commenced is unknown and must remain so; but, judging from its annual decay, breaking off and floating away below, gives probability to the conjecture that it was more than four hundred years ago. The Caddo In-

dians say that the residence of their immediate ancestors was on Caddo prairie, now the bottom of the present Caddo lake, and this is at the upper end of the obstruction. This open lake, about one and a half miles in width and thirty or forty long, is about eight feet in depth under general winter water and the passway for the steamboats. When the raft was first seen by the earliest white settlers is and will also remain unknown. When Alexandria and Natchitoches, one hundred miles above it, were first settled, the raft was above them, and this latter Spanish town was founded as early as the city of Philadelphia. When operations were commenced by the United States engineers, in 1833, under Captain Shreeve, its lower end was at the mouth of the Loggy bayou, which is the outlet of Lakes Bodeau and Bistmon, and near four hundred miles above the mouth of the river and the commencement of the obstruction, all below having rotted and passed away. We are not in so much doubt, however, how the raft was first created. The cause, it seems generally agreed, was, that the waters of the Mississippi being high from a freshet when the Red river was low, its waters backed up and made still-water at its mouth. The rafts of trees, logs and drift that came down the Red river were stopped by the ceasing of its current in this still-water, and spread over the surface from bank to bank and there accumulated. When the Mississippi water fell, all this accumulated drift over so much surface, seeking passage out at the same time, united and tangled from shore to shore and stopped and made a jam. The mass of imbedded logs near the mouth and very many places above, that show themselves in low stages of the river, make this certain. The jam once established, as nothing could pass, increased each year according as the extent of the annual freshets brought down more trees and drift, and this accumulation probably was at about the rate of one and a half miles a year, while after a time from decay it broke away below, drifted off and made a clear river at something like the average of about one-half that space. When surveyed for the operations that were begun in 1833, its length was a little under one hundred and thirty miles. Since 1833 it has extended to about thirty miles above where it ended at that time. The sap woods of the swamp under the alternations of wet and dry were not many years in rotting, and when completely rotted broke away and past down the stream so as to make again an open river. The annual increase, exceeding the decrease, gave length to it and advanced it into the upper country; and if these were the days of M. Van Winkle, and we would wait about two hundred

years, it would give us navigation up to Fulton, near the natural obstruction known as the White Oak Shoals, and about eight hundred miles above its mouth.

The United States government, under Captain Shreeve, commenced operations in 1833 on the raft, then one hundred and twenty-eight miles long and four hundred above the original obstruction. The lower part of the raft was then in such a state of decay, and yielded so readily to the graplings of the steamer, that about one hundred miles were pulled away the first season, and good navigation established through it up to Coates' bluff, now the flourishing town of Shreeveport, so called in compliment to that officer. This, so lately an uninhabited bluff, is the commercial inlet to the comforts and conveniences of about three hundred families, and it ships more than 60,000 bales of cotton this year. All that yet remains of this formidable barrier may be about fifteen miles in length. The raft here, being of recent formation, does not give the benefit of being rotted, and has, therefore, to be dismembered by the axe and the saw, and the force of steam is necessary to pull it apart. The distance is short but the labor is much greater. It is speaking from report to say the United States engineer, now engaged in this great work, has avoided this labor by selecting one of the three bayous that the obstruction has forced the river through, and proposes opening it into Caddo lake, (the only navigation when there is any,) and through that into the river again, about thirty miles below the raft and near to the town of Shreeveport. It is a natural inquiry, Will the river, after being opened, keep open? and the answer is, certainly. There is nothing to make this river an exception to all others. What the broad stream brings the broad stream will carry on. The error heretofore has been to act on the supposition that the waters of a creek would carry the drift of a river three or four times its size. The open river above the raft for about three hundred miles pours down a stream between five and six hundred feet wide, and brings its string of logs with it. Was it reasonable to expect that either of its three outlets or bayous, not containing more than a fourth of the space or quantity, could give a passage for them through it? To a common understanding the impression would be that it would not, and especially with the snags and hangs usual in an entirely unimproved navigation. The upper mouth wide enough to receive the whole contents of the river, and with a similar speed of current, and with a steamer employed for some years to assist the varying operations of the stream, would seem to promise all that is wanted. The greatness of the enter-

prise warrants any trouble in reason it may give for a few years to have such a stream with so much of future promise kept open and in order.

The Red river extends a distance of about one thousand seven hundred miles, through the most fertile body of lands in the United States, and all below the latitude of 35°, and which, within no long period, will be inhabited by a dense population, and its waters freighted with the produce of its unlimited fine range for cattle and hogs, and also with cotton, wheat and other grains, and the varied produce that belong to so much fertility and such latitude. These advantages attend the removal of the raft. Let us look a moment at the disastrous consequences of leaving the obstruction that has already and is now taking place. Caddo prairie, already described and formerly settled, is now a lake, and this is but a small portion of the lands similarly situated. The comfortable houses of many a family is now a noxious lake. Its mischievous upward march is most strikingly seen from the eminences that skirt the swamp above this. You there see under you, as I have done, perhaps one hundred thousand acres of timber in all its various stages of decay, those nearest the obstruction showing nothing but their rotted trunks standing, those next having a part of their limbs on, and those above that dead and dying with their leaves yet on. The usual winter water, at seventy miles above the head of the raft, now backs up and covers the land about four feet higher than it did twenty years ago, and many at that distance have been obliged to abandon their farms. It requires but little prophecy to see what must soon be the condition of the upper settlers. Their farms will be lakes, and they must pull up their tent pins and march.

FRANCE IN 1855.

We are indebted to the Paris correspondent of the National Intelligencer for the following:

M. Legoyt, of the Bureau of Statistics attached to the Ministry of Agriculture and Commerce, has published a volume of French statistics, being the continuation of a similar volume published under government auspices in 1837.

The total surface of continental France is 52,305,744 hectares, (129,250,387 acres;) of which about 49,300,000 hectares (121,823,028 acres) are taxable, and the balance, 7,427,359 acres, consisting principally of public highways and unproductive domains, are not taxable. The quantity of arable

land is estimated at about 25,500,000 hectares, (63,011,909 acres;) of meadow at about 5,000,000, (12,355,277 acres;) of vineyard at about 2,000,000, (4,942,111 acres;) of orchards, nurseries, and gardens about 600,000 hectares, (1,482,633 acres.) It is calculated that France, in an average year of production, produces three hectolitres (8¼ bushels) of grains and one hectolitre (22 gallons) of wine for each inhabitant. Upwards of 7,000,000 of hectares, or more than one-eighth of the whole superfices of France still remains waste land, common pasture, heath, or uncertain land. The average quantity of grain produced per hectare in France is thirteen hectolitres, (35¾ bushels,) which is equivalent to fourteen and a half bushels per acre; while in England, says a writer in the Constitutionnel, the production is on an average twenty hectolitres per hectare, (22¼ bushels per acre.)

The number of houses of all sorts in France, including dwellings, warehouses, shops, factories—in fine, all constructions used for habitations, commerce, or manufacture—is, or was in 1846, the date of the last enumeration, 7,462,545; presenting in the aggregate 44,283,363 taxable doors and windows, and covering about 250,000 hectares (617,764 acres) of surface.

France is notoriously the country of small land owners. The minute subdivisions of territorial property is generally cited as one of the most efficient causes of the inferiority of French agriculture when compared with that of most other countries of Europe. The parcels of land are so small as to be generally insufficient for the support of a family, or to admit of the smallest outlay of capital or manure, improved instruments of husbandry, or superior systems of agriculture. Accordingly we find territorial property in France divided into 126,210,194 lots or parcels; which, considered in connexion with the quantity of arable land above given for all France, exhibits as the average size of cultivated lots in this country just *half an acre*. These lots are owned by 13,122,758 proprietors. Thus each proprietor owns on an average about 4½ acres of arable land; and these 4½ acres are cut up into nine distinct lots. These lots are often separated from each other by considerable distance; so that a land-owner who would visit the whole of his domain of 4½ acres on the same day must spend nearly his whole time in so doing. The evil of minute subdivision of territorial property, great as it has ever been since the first revolution, would seem to be increasing. In 1827 the number of land-owners was 11,053,702; in 1842 it was 11,511,000; in 1854, as above stated, they numbered 13,122,758, or 36½ per cent. of the whole popula-

tion. It is perhaps true, as has been suggested, that the remarkable increase in the number of land-owners since 1842 is attributable in part to the increased demand for building lots required by progressive agriculture and manufactures. From 1815 to 1846 the number of taxable houses increased from 5,564,000 to the above-given figure of 7,462,545.

France possesses, in five great fluvial basins, an aggregate length of 8,817 kilometres, (5,478½ miles) of navigable rivers; 97 canals, of which the aggregate length is 4,715 kilometres, (2,929¾ miles;) 654 imperial roads, of an aggregate length of 36,038 kilometres, (22,393 miles;) 1,694 departmental roads, of an aggregate length of 45,626 kilometres, (27,108 miles;) 69 strategic roads, of an aggregate length of 1,463 kilometres, (909 miles;) and 284,737 vicinal or cross roads, of an aggregate length of 558,441 kilometres, (347,000 miles.) The number of bridges in France having a length each of twenty-two yards or more is 1,914, supported upon a total number of 8,000 arches on trusses.

With regard to the railroads of the empire, Mr. Legoyt's volume does not give information up to the present moment. But, before dismissing this portion of the statistics, I will give, from an official report published in the Moniteur, the following items concerning them. The total length of railroad opened and in use in France at this time is 4,975 kilometres, (3,091¼ miles,) made up of the following roads of the length annexed:

Names.	Kilometres.	Miles.
Northern Railroad	707	439¼
Anzin and Somain	19	11¾
Paris and Strasbourg	863	536
Montereau and Troyes	100	62
Western Railway	258	160¼
Paris and Rouen	139	86¼
Rouen and Havre	92	57¼
Rouen and Dieppe	51	31¼
Paris and Orsay	25	15½
Grand Central	215	133½
Orleans and branches	1,155	717¾
Paris and Lyons	555	344¾
Lyons and Mediterranean	528	328
Southern Railway	251	156
Ceinture (around Paris)	17	10½
Total	4,975	3,091¼

The most profitable roads are the Paris and Lyons road, of which the gross receipts during the six months were 35,051 francs per kilometre, the Grand Central 31,914 francs per

kilometre, and the Northern Railway 30,524 francs per kilometre.

There are upwards of five thousand kilometres more of railways in France now in process of construction, or conceded and soon to be commenced.

As for the population of France, the census during the last fifty years establishes a very satisfactory progression. In the year 1700, under Louis XIV., it was 19,669,000; in 1784, under Louis XVI., it was 24,800,000; the increase being only a little upwards of five millions in the space of eighty-four years. In 1851 the population had swollen to 35,783,170; showing since 1784, a period of sixty-six years, an augmentation of eleven millions. The Constitutionnel, which now-a-days never lets slip an opportunity to snap at the defunct republic of 1848, states a curious fact touching the progress of the population, and, whether rightly or wrongly, attributes it to the republic, with a sneer at its pretension to have been instituted for the people's good. The fact is, says the Constitutionnel, that in five years, from 1841 to 1846, the population of France increased by 1,171,000 inhabitants; and in five years, from 1846 to 1851, (embracing the republic,) the increase was only 483,000.

Of the 35,783,170 population in 1851, the census shows 20,351,628 engaged in agriculture; 2,094,371 engaged in manufactures; 7,810,144 artizans, mechanics, and tradesmen; 4,000,000 nearly members of the liberal professions; 753,505 domestic servants; and 782,496 mendicants, invalids, persons supported by public charity, and vagabonds.

There were 44,970 insane persons, 29,512 deaf and dumb, 37,662 blind, 75,063 blind of one eye, 42,384 afflicted with goitre, 44,619 hump-backed, 20,378 lame, and 22,547 club-footed.

In France the annual number of births has been for a long time stationary at about 960,000 per annum. This gives one birth for 37.48 inhabitants. The number of deaths, not including the still-born, is 811,000, or about one for forty-three inhabitants. The number of marriages is 277,000 per annum, or one for 128.20 inhabitants.

FACTS UPON YELLOW FEVER—ITS PROGRESS NORTHWARD.

By Dr. Nott, of Mobile.*

1st. *Its origin.*—Whether this epidemic was really imported from Africa or not, is a point which cannot be settled from any data yet made public, and I shall not offer you any

* In a letter to a citizen of the District of Columbia.

speculations on it. One fact, however, is certain, that this disease has travelled steadily on, since its first appearance in Rio Janeiro five years ago, along the Caribbean gulf and Atlantic coasts, until it has at length reached Norfolk. No mortal of our day is endowed with the spirit of prophecy; but still we can often, from the lights of history and observation, predict with tolerable certainty coming events; and it was on such data that I ventured to foretell that yellow fever would go as far as Norfolk, which is about the boundary of the yellow fever latitude, and also suggested the strong probability that it would visit our northern cities, where it does occur at long intervals. Now, the grounds upon which I made these predictions were as follows: Yellow fever has at long intervals, not only in the Mediterranean, along the Spanish and French coasts, but in in the United States, (about fifty years ago,) taken on this *travelling* character. About the time alluded to, yellow fever extended from southern ports to Norfolk, and thence to *Winchester* in the interior; to Philadelphia, to New York, and thence to Catskill, on the North river, and to Hartford and Middletown. The epidemic in question had steadily progressed for three years, from Rio to Mobile, and on to Key West; and with all these facts before me I did not hazard much in predicting that its progress was onward in the direction it had been travelling.

Type of the disease.—Few men in the United States have seen more of yellow fever than I have, and I have no hesitation in saying that this is substantially the same disease as the yellow fever which occurred in Philadelphia in 1793, and which has appeared from time to time since. It is the fact with typhoid fever, cholera, plague, scarlet fever, small-pox, and all epidemic diseases, that they appear in different *grades* of violence at different times, and occasionally have a greater tendency to travel over a large extent of country. This has been the case with the yellow fever in question; but its mode of attack, its course of symptoms, including yellow skin and black vomit, its average duration, &c., are the same as other yellow fevers, and, though it may have been somewhat more virulent, it is still the same disease.

Contagiousness.—This is a knotty point, and I have not space to do more than express my conclusions. Under the term contagion are compounded two distinct questions, viz: *contagiousness proper*, or the communication directly of yellow fever from one human subject to another; and, secondly, the *portability* of the cause or germ by vessels from one port to another. Although my mind leans at present towards a belief in the contagiousness of *this* disease in certain in-

stances, I still doubt, and my judgment is in suspense; but, with regard to its *portability* by vessels from place to place and by railroads, I do not see how any human being familiar with its history can doubt, and I should advise our northern friends to quarantine rigidly against it. *The disease has gone to every point within a certain distance of the gulf which was frequented by steamboats and railroad cars*, and I believe would have entered New York in 1853 had it not been stopped at the quarantine.

Treatment.—This is too complicated a point to touch in a letter; but I must correct the error which you quote from the newspapers as attributed to me, viz: "He told our physicians not to treat it with medicine. Drugs were tried, and every patient treated with them died. He advised water alone, internally and externally." Now, sir, such language was never used by me. It is nevertheless perfectly true that yellow fever, as we see it at the south, is a disease of low action, which does not bear active medication. Bleeding and active purgation or emetics are worse than useless, and more good is effected by good nursing and constant attention to varying symptoms than by violent remedies. Cold drinks, as ice-water, lemonade, and also cold sponging in the hot stage, are all very refreshing and proper, but cold water has no specific virtue in controlling this Herculean disease. It is a remarkable fact that after one of these great epidemics it is hard to find a doctor who has lost any patients, and yet about twenty per cent. of those attacked have been numbered with the dead. Epidemics are great scourges sent by the Almighty; and not only are we without remedies against them, but in the face of the most opposite plans of treatment the per centage of deaths continues about the same in all times and in all places. The discovery of vaccination alone has been heralded as a triumph, and I see that a distinguished physician in Europe has just published a book to prove that vaccination is a great curse, which leaves in its train consumption and scrofula.

Very respectfully and truly your friend,

J. C. NOTT, M. D.

MILITARY DEFENCES OF VIRGINIA—NO. 2.*

WHAT THE SOUTH IS THINKING AND SAYING ABOUT THE ENCROACHMENTS OF THE NORTH.

Long life to the Union! may its shadow never be less! It was designed to "establish justice, ensure domestic tranquillity, provide for the common defence, promote the general

* Richmond Enquirer, August 10.

welfare, and secure the blessings of liberty to ourselves and our posterity," and, therefore, we love and cherish it. It was the work of demi-gods, and hence we revere it.

But we have fallen upon evil times. There is reason to apprehend that it is to be perverted from its noble ends and used for far different purposes. If it pass under the control of fanaticism, then will justice be overthrown rather than established, domestic tranquillity give place to intestine convulsions, the common defence and general welfare be disregarded, and the blessings of liberty lost to ourselves and our posterity. Anti-slavery agitation threatens to accomplish these fell purposes. It was a union of slave States in its birth; and when the institution of slavery comes to be a source of inequality and injustice, the Union, as originally constituted, will have ceased to exist.

That condition, we fear, is already in sight, and nothing can avert it but the gallant stand for the Constitution made by northern men. We of the south must be, in the main, passive spectators of the strife. All that we can do is to save our friends from reproach by the moderation of our conduct, and to strengthen them by the firmness of our attitude. This is all we can do for the Union; but there is much to be done for ourselves, and but little time to perform it.

In a few years Kansas will probably ask admission into the Union as a slave State, and may be refused. It needs but freesoil predominance in the House of Representatives to achieve this end. If refused admission into this Union, she will undoubtedly be received by another, and the United States, south, will begin their career. This proposition is too clear for argument. Nothing but rank cowardice could induce the south to acquiesce in the exclusion of a slave State on the score of slavery. We assume, therefore, that the south will not acquiesce, and consequently we fear that in a few years Mason's and Dixon's line may be the boundary of foreign powers.

The possibility of this event creates grave responsibilities. Virginia will be a frontier State. Should war unhappily occur between the two republics, she will receive the first shock. The bare possibility of this thing demands instant preparation, as far as it may be made without hastening the event, and with strict fidelity to the Constitution.

If constitutional retaliation can be devised, and will probably be effectual, let us try it, but let not the failure of constitutional expedients find us unprepared for the change in our political relations that must ensue.

The next legislature will find the commonwealth threatened

with this contingency, and in the main unprepared for it. They will find her without an organized military force, save a few companies of volunteers, and without the means of concentrating troops with the rapidity indispensable to modern warfare. The Constitution prevents us from keeping troops or ships of war, but it does not prohibit a well organized militia, or a judicious system of military communications.

The legislature will be faithless to its gravest duties if it adjourn without organizing the militia and providing for the completion of such lines of improvement as will subserve military as well as commercial purposes.

We are civilians, and wholly incompetent to plan a system of military defences for the State, but there are some general considerations dictated by common sense, which even civilians may present without presumption.

It is generally conceded that a whole population cannot be drilled as soldiers. The abandonment of the old militia musters shows the opinion of our people on this point. Nothing, therefore, remains but to classify the adult male population and to drill such portion as may be withdrawn from their usual avocation without public detriment.

According to the census returns and the lists of tithables, there are not less than 200,000 fighting men in the State. One-tenth of these might be drilled without injury to themselves or to the public.

We see no reason why each of the existing regiments, increased in numbers to 200, might not be required to furnish a company of volunteers, or of draughted men at their option. These companies should be armed, assembled periodically at the regimental muster grounds and drilled.

The graduates of the Military Institute might be required to conduct these drills, instead of teaching school, as they are now required to do.

The companies might be organized into regiments, brigades, and divisions, and into infantry, artillery, and cavalry.

The advantages of such a system would be that, while no man would be carried out of his county, or injuriously withdrawn from his business, yet every county in the State, except some of the smallest, would have one or more military companies, ready to assemble at a moment's warning, to suppress insurrection or for police purposes. The State would possess a corps of 20,000 men, armed, organized, and drilled, and capable of being assembled in whole or in part, at short notice, for the purpose of offensive or defensive warfare, without seriously interfering with the ordinary pursuits of the people at large, or burdening one section more than another.

We know of no objection that can be urged to such an organization, except the difficulty of assembling the companies for battalion drill. This difficulty is incident to every system except the impracticable and exploded one of drilling the whole adult population. The moment this is dropped and the principle of classification adopted, it becomes difficult to assemble the requisite number of men without transporting them a considerable distance. Nevertheless the difficulty is not insurmountable. Where the population is dense it does not exist, and where the companies are widely dispersed, they should not be assembled so often as in other cases. The service would not be harder than in the present volunteer companies; and, therefore, the men might be kept enrolled several years, and by the periodical discharge of a certain proportion, and the incorporation of an equal number of new men, it would be rendered still easier.

The present volunteer companies would form a part of the proposed force, and where such a company was formed, of course drafting would not be required.

By some such system, an *elite* corps would be always at command to suppress insurrection, repel invasion, or act offensively, if required.

Only one thing more would then be needed for the present. Armies without the means of concentration are useless, and in modern warfare this is effected by steam, and with a rapidity not dreamed of thirty years ago. Twenty thousand men, dispersed through the State, would be available to suppress insurrection, but not to repel invasion, unless other means of transportation than their own legs be provided. A system of military communication is therefore indispensable to the safety of the State, and should be looked to forthwith.

To our unsophisticated view, the commercial lines already marked out are in the main such routes as military defence requires. We call attention to the map of Virginia. It will be found that the northern frontier presents what in military parlance we believe is called a salient angle. The northwestern face of this angle is covered by the Ohio, and the northeastern, to some extent, by the Potomac. Neither of these rivers could be crossed by an invading army if well defended, but the space between them, constituting the point of the angle and a portion of its right face, has no such protection. Moreover, the ranges of mountains and the rivers run from the centre of the State towards this open space, and thus present avenues of approach instead of lines of defence. Here, then, is the weak point on the northern frontier. On the east we are wholly exposed to maritime invasion. An

enemy, master of the ocean, could land where he likes. There is but one protected point, and that is Hampton Roads. A fleet entering the capes, with an army on board, might land it at Lynnhaven bay, within twelve miles of Norfolk, or in York river, within forty miles of Richmond.

Fortunately for us, however, the railroads already constructed or under contract radiate from these two points to the interior, and need but completion to afford the desirable means of concentrating a force at either point. We should say, then, complete without delay the Petersburg and Norfolk and the Richmond and York River roads, for they are military roads of the first importance.

On the north matters are not so favorably situated, but still even here many of the roads tend in the right direction. The road from Harper's Ferry to Wheeling, partly on our own and partly on friendly soil, furnishes a means of communication from one flank to the other of the weak position on the northern frontier. The Parkersburg branch runs off in a southwesterly direction, the Hampshire and Loudon road to the southeast, and the Harper's Ferry and Charlestown road, together with the McAdamized road from the latter place to Staunton, leads off to the south.

But it will be observed that two-thirds of the trans-Alleghany region is wholly insulated, that it has no communication with the northern frontier, except a precarious one up the Ohio, and none with eastern Virginia. Yet this very region is the seat of a large proportion of the military strength of the State, containing, as it does, a majority of the white population. It is as if we had a citadel filled with men, and outworks feebly manned, with no communication from one to the other. The Covington and Ohio road pierces through the heart of this region, and will, when finished, pour its military strength either upon the seaboard, by the way of Staunton and Richmond, or upon the northern frontier, by the way of Staunton and Harper's Ferry.

It is obvious, then, at a glance, that the most important military road in the State is the Covington and Ohio road, for it not only developes the strength of the trans-Alleghany region of our own State, but connects us with Kentucky. So long, therefore, as this road is unfinished the right arm of the State may be regarded as paralyzed. It would be entirely useless to raise an army on the banks of the Kanawha to succor the exposed northern frontier or the defenceless seaboard, for the campaign would be decided before it could extricate itself from the mountain ranges east of that river. The completion of the Covington and Ohio road, and the filling up

the gaps between Staunton and Harper's Ferry, seem indispensably necessary to place the military defences of the State on a respectable footing. The Lynchburg and Charlottesville road is also important, as facilitating the connexion of the northern frontier with the southwest.

We call upon the legislature to consider these matters, and to give us a military force and the means of using it. Let it be done calmly, and without threat or menace. Avoid every measure calculated to wound our friends, but omit nothing necessary for our own defence.

Practical measures, and not abstract resolutions, are what the people wish and expect. No exception can be taken to the measures we have indicated, for they are strictly constitutional and eminently proper. Carry them out, and we shall be ready for whatever fate has in store for us.

SOUTHERN STATISTICS—AN ERROR CORRECTED.

The following is from the pen of an able writer in South Carolina, which, no many occasions, has adorned our pages. The justice of the reproof which is given us is most honestly admitted. It was by accident that the paragraph alluded to escaped attention until too late for correction. Those who know us know well that we have demonstrated, in a hundred places through the Review, the very reverse of what is stated in the Illinois article. In extenuation of this one sin will not others be as liberal as our reviewer, and set up, as even juries and stern judges will, the previous good conduct of the delinquent. The rock of safety will be here.

At a time when all the world seems leagued against us, (us of the southern United States,) when we are preached to, preached at, and preached against by every meddling Constitution tinker, black and white, male and female, from the late John Q. Adams, Lord Brougham, and the Duchess of Sutherland, to Fred. Douglas and Lucy Stone; while Kansas, nobly struggling into existence, has first to fight her home battles against free-soil aggression, and then to be insolently told: "Present yourself as a slave State for admission to the Union and Congress will reject you." Aye, and while southern blood yet tingles with this insult, the echo of it, as it were, comes from beyond the seas, telling us how England and France, forcing poor decrepid Spain into an unwilling league, arrogantly say to us, "Cuba, you *shall not* conquer, *shall not* colonize, *shall not* purchase; now and forever it shall be to you a forbidden ground, and your southern ports shall be watched over and kept in dread by a savage negro colony let loose to murder and pillage; and you shall bear it." God help us if we *do* bear it! But at such a time as this, when southern

hearts and southern hands (now twenty years too late, and still not hopelessly too late, in resistance) should be linked in union, waiting the speedy crisis which must make us an independent nation, or else the hopeless, helpless bondslaves of our traitor brethren, how are we preparing for the question of death or life, prosperity or ruin? Quarrelling, forsooth, among ourselves, sparring for party and office, and chattering about the follies of know-nothingism, when property, liberty, life, family, and country, hang trembling in the balance. Yet a little while, and it is not too late for the south to show what she can and dare be; but, again: yet a little while, and behold her, perhaps, the unresisting trampled victim of astute cunning and impudent assumption. Again, I say, *God help us!* for even with the prospect before us thus dark and menacing, we stand like some thoughtless child with its hand upon the serpent's fang, trifling with the venom which threatens our very existence. Thus, for example, while our northern brethren slander and misrepresent us at almost every stroke of the pen, our southern editors can often find no better material to cap a column, or to fill a paragraph, than some flowers of northern rhetorick, wherewith so thickly sprinkled is the ever ready venom, that unawares the poison is inhaled, as we breathe the odor of the blossom. And thus distorted representations of truth, carelessly copied, circulate with their double distilled venom, unargued against, uncontradicted, from mansion-house to cottage; and while we attempt to close our post offices against the bold attack whose very boldness makes it less dangerous, the atmosphere of our every fireside is poisoned, our every home-hearth tainted by the insidious phrase which nobody looks for in a southern paper, nobody questions, nobody doubts; and thus falsehood on falsehood, prejudice on prejudice creeps in, and prepares the unthinking, (and how numerous are the unthinking!) to receive for truth the weightier falsehood which comes to them, as in the end it surely *does* come, a corollary to these beginnings. Who does not remember, but the other day, when the foul slanders of "Uncle Tom" were issued from the press, how many of the weak-minded among us, who had been duly paragraphed and prejudiced by inuendoes from northern journals into a proper distrust of themselves and a gentle suspicion of the fact that they might possibly indeed be cannibals and murderers instead of Christian men and women, shaking their heads with dolorous look of startled emptiness, whined out their fears that "after all there was some truth in that book," and whimpered and shuddered,

and wished that God might pity them, but they did not know whether or not they were sinning in very truth.

Why, Mr. Editor, take your child, if you chance to have one, into the corner and lecture it upon its iniquities, frightening it with its most innocent deeds, even with its virtues, and the poor little victim will come out pale and trembling, thoroughly convinced not only that the great horned devil, with hoof, tail, and claws, stands ready to catch and devour it, but that it, in its own little innocent person, most richly deserves to be thus caught and devoured by the monster. So it is with too many children of the larger growth. Tell them daily that they are living in a bedlam of sin and corruption, and at last they will believe you. There are many minds which cannot make their own conclusions, which need to be educated, need to be led, and it is a solemn duty in those undertaking to educate and to lead to note well how they read their lesson.

We have been led into these remarks, Mr. De Bow, by the fact that, on lately taking up the last (September) number of your widely-circulated Review, with a wish to once more renew our acquaintance with an old friend, from whom sorrow and adverse circumstances had of late entirely estranged us, we fell naturally upon the first article, viz: "Statistical View of the State of Illinois," which is ushered in, by a special recommendation in a foot note to your readers, as an "invaluable paper." Certainly the unsuspecting, who wish to be thought for, have a right to give themselves up here to the indolent pleasure of catching the ready-made ideas presented for their accommodation, and to believe themselves safe in your hands. A southern periodical, of long standing and large circulation, an accomplished editor of known statistical experience, all must be safe, and we may take our facts without cavil. Such, we confess, was our own feeling as we set somewhat listlessly about the pleasant task of learning, without the trouble of working out our own ideas. But one—two pages—scarcely had we fairly entered upon the article, when a sensation somewhat approaching that of an unexpected slap in the face brought us to a sudden halt at the following paragraphs:

"But it has been well said, 'It is not the immense extent of territory, happily, which constitutes the grandeur of a State; for example, the United provinces of Holland, after having thrown off the yoke of Philip II., the most powerful king of his age, sustained with advantage a contest against Louis XIV., and, having conquered vast distant provinces, has since given a new destiny and high prosperity to a small kingdom. See, also, England, who started out with a territory of less than 150,000 kilom. (square) and now rules over millions.'

"This fact is so well established as scarcely to justify being illustrated, but the remarkable results which have been obtained by the indomitable enterprise and industry of the people in an inhospitable climate and upon a flinty soil, as contrasted with those obtained in a genial climate and on a generous soil, will justify

the introduction of the following facts as to the States of Rhode Island and South Carolina, and settle beyond a cavil or a doubt the true grounds upon which a State must rely for its greatness. The manufactures of Rhode Island are more valuable than the manufactures and cotton of South Carolina. Thus—

Rhode Island manufactures	$8,640,626
South Carolina manufactures	2,248,915
South Carolina raises cotton to value of	4,628,270

"The population of Rhode Island is but 147,545, while that of South Carolina is 668,507. The area of Rhode Island is but 1,306 square miles, while that of South Carolina is 29,000."

Now, sir, we must do you the justice to believe that you were busy, or travelling, or indisposed, or in some other way prevented from a fair perusal of your proof-sheets. We have ourselves ere now, if we remember rightly, run the gauntlet of your statistical corrections, and acknowledged ourselves fairly chastised and honestly reproved. Most undoubtedly, if you read the above statement at all, it must have been at past the witching hour of night, when editors, like common folk, begin to wink their eyes and long for their pillows. The error of it (to use no harsher term) is too flagrant to escape any wide awake eye. I say nothing of the spirit of the remark, which shows certainly anything but kindness from the champion of the big Illinois giant, who thus singles out the weakling, South Carolina, as the object of unkind taunt, for her immense inferiority to her little Yankee sister, Rhode Island, and which points his moral by holding up said South Carolina as a warning to all lazy backsliders, in contrast to her industrious little rival, who shows us, "beyond a cavil or a doubt, the true grounds upon which a State must rely for its greatness."

We pass over the invidiousness of the conclusion to show the insidious falsehood of the statement, or the absolute ignorance of every principle of political economy in the maker of it. "*The manufactures of Rhode Island are more valuable than the manufactures and cotton of South Carolina.*" Is the writer ignorant of the difference between a gross and a net revenue? Does the merchant of Chicago who sells $50,000 worth of goods in the year, for which he has paid $48,000, do a more profitable business than the neighboring farmer who sells the proceeds of his harvests for $6,000, after paying all expenses with $2,000? In our humble opinion, the farmer makes double the gains, and has double the income of the merchant, while, according to the reviewer's system of calculation, the merchant has made more than eight times the profit of the farmer. It is scarcely necessary, we presume, to quote Say and Ricardo to prove that the farmer is the richer man; and yet, in our supposed case, we have the parallel fact to the one upon which the reviewer bases the superiority of Rhode Island. South Carolina, an

agricultural State, incurs, like the farmer, but small expense in the raising of her produce. Of the staple which she sells she buys nothing; and after the expense of supporting her laborers, which is small, (their principal provisions being of home growth,) all is clear gain. Even what she manufactures brings her small expense, for she but works up her own produce, which costs her nothing, even as the farmer's wife might spin and knit him socks from his own wool. Her $2,248,915 of manufactures, and her $4,628,270 of cotton, give her $6,877,185 of revenue, nearly free of expense, to say nothing of her rice and other smaller products which are in this calculation entirely ignored. On the other hand, Rhode Island, like the Chicago merchant, has begun by a large outlay. She has not only to support her laborers at an infinitely larger expense than South Carolina, but also to meet immense expense of machinery from which South Carolina is exempt; and again to pay for the material, the cotton and the wool, which she resells in the shape of manufactures, even as the merchant paid for his goods. Does the author of Illinois statistics call all this nothing? He seems to have imagined the cotton and wool a windfall, a dew from heaven, a costless blessing. And the machinery, does it grow on the barren rocks, like oysters, perhaps, or New England clams, to be taken for the gathering?

We have, unfortunately, no means at hand to assist us in computing what would in truth be the net income of Rhode Island according to the reviewer's own statement of her gross income; but we have said enough to show how grossly the south is constantly misled by the misrepresentations, wilful or careless, of those alien to her interests. And such a misrepresentation as the one in question is no trifle. It is no unusual mode of attack upon the slave States to endeavor to prove the utter worthlessness of their institutions. We are told of our poverty, our wretchedness, our incapacity for progress, and this is dinned into our ears and driven in upon our senses, until we at last (some of us, at least, the leadable portion of the community) give in to the often-repeated falsehood, and, with every blessing that *God* can shower upon a happy and prosperous people, (wanting nothing but to be let alone in the enjoyment of his gifts, undisturbed by meddling fanaticism that thinks itself wiser than *God*,) we begin to bewail our unlucky fate. We see the big horned devil with his claws and his forked tail; and so, with our own rich and happy country to be proud of, by dint of doubting and fearing and fancying ourselves wretched, we run great risk

"To make ourselves e'en that which most we fear."

The south has but one resource, one hope in these times of

peril, to save her from destruction. Adopting that resource, cherishing that hope, she is invincible. An energetic consciousness of her own power is intensely necessary to that union of effort without which she falls. "A long pull, a strong pull, and a pull altogether," would give her a stand stronger than Sebastopol against the allies. Let us cease, then, to feed the weak among us with silly tales to sap our own strength, and, remembering how often "our doubts are traitors," let us carefully avoid making our own periodicals the vehicles for instilling such doubts into minds which it is the duty of these very periodicals to instruct and enlighten.

In our remarks we have limited ourselves to proving the inaccuracy of the statement upon which we have commented. We have simply proved that it is *not a fact* that the manufactures of Rhode Island are more profitable than the manufactures and cotton of Carolina. That their profits are very great we do not deny; but these profits, even were they as enormous as the reviewer has stated, could scarcely, we think, even then be considered as settling "beyond a cavil or doubt the true grounds upon which a State must rely for its greatness." We who remember the struggle for "free trade," in which the gallant little State, here placed in invidious juxtaposition with Rhode Island, took no insignificant stand, can tell something of the beginnings of those profits. We can tell how, by means of tariffs and American systems, New England manufacturers drained the pockets of southern planters, and doubt, not a little, whether such political pilfering is the true ground "on which a State must rely for its greatness." Aye, and even now, this same little Rhode Island which, like a leech, has sucked itself full from our fatness—even now, could her iniquitous schemes of abolitionism be realized, and the slaveholding south be (as in the blindness of her madness she asks that it should be) laid a desert waste, the sacrifice to her headlong fanaticism—even now, we ask, where and what would be her greatness and her profits unsupported by that south which she reviles? Will the author of "statistical views of Illinois" answer us on this point? To us it seems that without these same southern slaveholding States, without their produce, without their cotton, Rhode Island would have little to characterize her beyond "her inhospitable climate and her flinty soil." Whatever may be the conclusions on this point in the latitude of Chicago, surely *we* of southern blood and southern home, with southern duties and southern hopes, should cease to play into the hands of our enemies by helping to circulate laudations of them, at the expense at once of truth and of our own rights.

JOURNAL OF HOME AND FOREIGN COMMERCE.

COMMERCE OF THE PACIFIC.

THE SAN FRANCISCO AND SHANGHAE MAIL STEAMSHIP LINE.

One great fault which our Atlantic brethren exhibit, when speaking of the western coast of the United States, is an almost total want of knowledge of the commerce, trade, and resources of the Pacific. Dwelling contiguous to another great ocean, they appear to feel no particular desire to inquire what is going on upon the bosom of the great sea, upon a part of whose shores it is our lot to reside. California has frequently been represented in our national legislative halls as having been a constant applicant for favors, and as swallowing up a large amount of the national resources, whilst the questions, how much the wealth and enterprise of California have added to our national prosperity, how far the produce of our gold mines have sustained the tottering credit of the whole Union, and how much the facilities of our position have given and are destined to give to American commerce, if not entirely lost sight of, are treated not as being essential to the proper appreciation of the subject, but as merely involving speculations in finance.

Upon one side of the Pacific ocean there dwells a new, but energetic people, coupling the experience of age with the strength of youth, possessing untiring industry, great adaptation to every variety of pursuit, and a nautical skill which must ere long take the palm from the oldest and most powerful maritime nation; upon the other side exists the oldest civilization on earth, a very high degree of industry, deficient, however, in the method by which inventions and discoveries are made, and a great fondness for commercial pursuits, which is only limited by imperfect navigation and a very great inferiority in their naval architecture. To connect these two nations, there was introduced into the House of Representatives, during the last Congress, a bill to provide for the establishment of a mail steamship line between San Francisco and Shanghae. The advantages of such a communication were well urged by the representatives from this State, and an unanswerable array of facts, figures, and statistics set forth, but altogether without success. It is to be hoped that during the coming session the subject may again engage the attention of our delegation, and that being brought forward at a more propitious moment, Congress will be inclined to give a more favorable hearing to the case.

Reports to Congress and to the British House of Commons

afford elaborate statistics of the comparative commerce of the United States and England with China, and from these it appears that at present the balance of trade between the two last is vastly in favor of England, whilst *ours*, yet in its infancy, presents an entirely different aspect, having a wide margin for the enterprise of our merchants. British trade depends at present upon the capacity of China to pay in *cash*, while with us they can yet for a long time pay in goods and products of their own. The English trade cannot long continue, since all the imports for Chinese consumption, and all, or nearly all, the freights are earned by English or American vessels. Thus it would appear that we are better circumstanced than the English; and so long as our population and increase are at a more rapid rate than those of any other country must our capacity for greater exports and imports increase.

The advantages which San Francisco possesses from its position in augmenting the trade between the two countries is very great. Situated upon the same ocean, the loss of time, the expense, and the dangers attendant upon a voyage round the capes is avoided, and such articles as would so deteriorate as to become almost valueless after a long voyage through the various temperatures passed through by ships bound round the Horn or Cape of Good Hope might safely be shipped from our eastern ports. Instead of sailing from eighteen to twenty thousand miles to reach a market, the distance between New York and Shanghae would be reduced to eight or ten thousand. Add to this the immense advantage that would be gained by our merchants from the early intelligence they would receive of the wants and demands of distant markets, whereby they might anticipate the supplies of all other maritime countries. All the information received by our merchants *now* comes by way of England, giving to shippers there an advantage of at least ten days. Should this mail route be established, commercial intelligence would reach New York more than ten days earlier than the same information could arrive at Liverpool by the present English overland mail route. The quickness with which such intelligence could be conveyed would serve to multiply commercial transactions, and diminish the risk attending them, inasmuch as our merchants will be enabled to improve the first favorable turn in the market. Since the settlement of California the commerce between the United States and China has been more than doubled. During nearly the whole of this period, too, it will be recollected, China has been convulsed with civil war, and her usual trade, foreign and domestic, has been almost broken up; still under all difficulties we have been gradually increasing our trade with that country, and gradu-

ally impairing the commerce of the English, the French, and the Dutch in that quarter of the world. England has numerous great chains of ocean steam lines, and they connect with nearly every quarter of the world. For this reason she at present controls the commerce of the Chinese seas and the Indian archipelago. We now have almost entire control of the trade of the Sandwich Islands, with a fair prospect of soon supplying the wants of many of the other numerous islands of the Pacific, while our pioneer trading ships will soon open with Japan a new and important commerce. And the same advantages would be extended to all these countries by the establishment of the line of steamships to Shanghae.

SAN FRANCISCO, CALIFORNIA, *August* 16, 1855.

COMMERCE OF SOUTHERN CITIES, 1854–'55—NEW ORLEANS.

The following is from the report of the New Orleans Prices Current, showing the receipts from the interior up to the 1st September, for one year. The other tables of this report, together with extracts from those of the Bulletin, Picayune, Delta, etc., will appear hereafter.

Articles.	Amount	Average.	Value dollars.	Articles.	Amount	Average.	Value dollars.
Apples.....bbls	35523	$2 20	78177	Lime, west.....bbls	19233	1 10	21156
Bacon, as hhds & cks	40757	70 00	2855090	Lead .....pigs	70514	5 00	352570
Bacon ..assorted bxs	3492	23 00	80316	Lead..bar, kgs & bxs	301	18 75	5644
Do hams, hhds. & tcs	31871	65 00	2089115	Lead, white.....kegs	269	4 00	1076
Do in bulk.....	232920	8	18633	Molasses (est. c'p) gls	28000000	18½	4255000
Bagging.....pcs	40578	15 00	608670	Oats .....bbls & sks	489978	1 25	549972
Bale rope .....cls	95336	7 00	667352	Onions .....bbls	11665	3 50	40827
Beans .....bbls	4690	5 50	25795	Oil, linseed .....do.	348	40 00	13920
Butter, kgs and firks	33874	7 00	237118	Oil, castor.....do.	2617	45 00	117765
Butter.....bbls	1017	30 00	30510	Oil, lard.....do.	13332	35 00	466620
Beeswax .....do.	141	50 00	7050	Potatoes .....do.	70539	2 50	176348
Beef .....do.	31899	13 00	414687	Pork .....tcs & bbls	276393	15 00	4145895
Beef.....tierces	9679	20 00	193580	Pork .....boxes	7458	36 00	268488
Beef, dried.....lbs	23850	9	247	Pork .....hhds	3067	65 00	199355
Cotton.....bales	1284768	40 00	51390720	Pork in bulk.....lbs	6163650	6	375819
Corn meal .....bbls	225	4.50	1013	Porter and ale ..bbls	1217	10 00	12170
Corn in ear.....do.	10701	1 40	14981	Packing yarn...reels	1723	12 50	21537
Corn shelled .....sks	1110446	2 15	2387539	Rum.....bbls	1850	18 00	33300
Cheese .....bxs	45245	4 50	203602	Skins, deer .....pks	493	30 00	14790
Candles .....do.	56383	8 00	451064	Skins, bear,.....pks	15	15 00	225
Cider .....bbls	14	3 00	42	Shot .....kegs	3435	24 00	82440
Coal, west.....do.	1018000	55	5599000	Soap.....boxes	7783	3 50	27240
Dried ap & pchs..do.	1252	6 00	7512	Staves.....	4000	47 00	188000
Feathers .....bags	1078	28 00	30184	Sugar (est. crp) hhds	346635	52 00	18025020
Flaxseed.....tcs	281	12 00	3372	Spanish moss ..bales	4729	15 00	70935
Flour ....bbls	678111	8 25	5593166	Tallow.....bbls	711	30 00	21330
Furs..hhds, bdls, bxs	802	.....	300000	Tobacco, leaf...hhds	42692	130 00	5549830
Glassware.....pkgs	16384	4 00	65536	Tobacco, strps...do.	8109	180 00	1445620
Hemp .....bales	31335	30 00	940050	Tobacco, stms ...do.	2548	40 00	101920
Hides	84298	2 25	189670	Do.....ch, kgs & bxs	4153	25 00	103825
Hay .....bales	73271	5 00	366370	Twine..... bdl & bxs	3249	10 50	34115
Iron, pig.....tons	17	35 00	595	Vinegar.....bbls	1026	6 00	6156
Lard .....bbls & tcs	144036	25 00	3600900	Whiskey .....do.	108854	12 00	1306248
Lard .....kgs	98326	5 00	491630	Wheat .....bls & sks	31288	2 80	87606
Leather.....bdls	5302	30 00	159060	Other articles, estimated at			5000000

Total value	117106823
Total in 1853–'54	115836789
Total in 1852–'53	134233735
Total in 1851–'52	108051708

COMMERCE OF MOBILE, 1854-'55.

Comparative view of the Imports and Stocks of the following Staple Articles.

Articles.	Imported into the port of Mobile.				Stocks in hands of dealers, Aug. 31.				
	1854-5	1853-4	1852-3	1851-2	1855	1854	1853	1852	1851
Bagging.....pcs	20,234	21,010	29,870	21,260	5,058	3,013	3,389	1,812	4,312
Rope.....coils	27,630	21,283	32,466	17,933	4,290	3,374	5,343	2,090	8,118
Bacon, sides, shl'drs, hhds	14,145	15,520	15,841	13,288	325	454	331	563	649
Hams.....tierces	3,282	.....	.....	.....	134	.....	.....	.....	.....
Beef.....bbls	1,154	.....	.....	.....	167	.....	.....	.....	.....
Coffee.....bags	25,162	21,190	30,721	29,027	1,197	1,476	4,925	1,295	1,920
Cotton—Alabama..bales	466,328	.....	.....	.....	28,238	.....	.....	.....	.....
Florida....bales	.....	.....	.....	.....	.....	.....	.....	.....	.....
Texas.....bales	574	.....	.....	.....	.....	.....	.....	.....	.....
Flour.....bbls	43,045	61,113	75,172	86,756	1,363	1,843	1,543	998	1,939
Do Alabama....sacks	760	.....	.....	.....	.....	.....	.....	.....	.....
Corn—Ala. shelled..sacks	11,958	174,230	105,858	100,615	5,535	7,484	9,603	1,900	12,788
Ala. in ears...bbls	10,200	.....	.....	.....	.....	.....	.....	.....	.....
Western.....sacks	78,908	.....	.....	.....	5,539	.....	.....	.....	.....
Oats.....sacks	26,936	62,913	27,173	23,052	1,824	4,677	2,546	818	5,050
Hay.....bales	14,616	24,207	25,024	28,085	2,180	3,492	3,109	2,220	6,225
Fodder.....bales	309	.....	.....	.....	52	.....	.....	.....	.....
Lard.....bbls	1,647	.....	.....	.....	175	.....	.....	.....	.....
Lard.....kegs	5,862	15,704	24,904	23,733	552	858	916	608	932
Cheese.....boxes	5,578	.....	.....	.....	143	.....	.....	.....	.....
Butter.....kegs	3,409	.....	.....	.....	194	.....	.....	.....	.....
Candles.....boxes	4,840	12,815	.....	.....	1,365	1,580	952	.....	.....
Cement.....bbls	3,584	.....	.....	.....	1,060	.....	.....	.....	.....
Lime.....casks	7,746	7,508	28,127	32,109	3,155	1,550	3,145	2,175	1,650
Staves.....thousand	76,600	.....	.....	.....	.....	.....	.....	.....	.....
Molasses.....bbls	28,343	41,123	20,647	18,691	845	2,156	1,802	793	769
Potatoes.....bbls	9,063	21,285	25,553	24,072	328	89	137	224	895
Pork.....bbls	10,485	13,321	19,416	18,374	193	530	417	515	2,087
Rice.....tierces	1,530	2,472	1,448	1,766	72	224	35	32	126
Sugar.....hhds	7,017	8,691	8,313	7,198	310	605	1,015	133	576
Salt.....sacks	148,572	108,972	140,828	135,009	10,450	28,179	2,487	3,419	18,916
Whiskey.....bbls	17,826	21,730	20,953	19,013	1,916	2,033	3,456	3,322	3,085
Wheat.....sacks	3,281	.....	.....	.....	213	.....	.....	.....	.....

Exports of cotton to foreign ports from Mobile for two years ending August 31.

Exports to foreign ports, &c.	1855.			1854.		
	Bales.	Pounds.	Value.	Bales.	Pounds.	Value.
To Great Britain—In Am. vessels	136917	67942252	$5955568	80780	40942080	$3461542
Do British vessels	78331	39040032	3240205	149660	75087433	6336124
Do Bremen vessels	.....	.....	.....	795	404678	32705
Total to Great Britain	215248	106982284	9195773	231185	116434141	9830371
To France—In American vessels	109690	54674608	4660043	76786	38884048	3493132
Do French vessels	1400	709806	56363	.....	.....	.....
Total to France	111090	55384414	4716406	76786	38884048	3493132
To Spain—In American vessels	.....	.....	.....	.....	.....	.....
Do Spanish vessels	3777	1785570	197245	7858	3695429	391625
Total to Spain	3777	1785570	197245	7858	3695429	391625
To Russia	.....	.....	.....	.....	.....	.....
To Holland	2900	1452588	113298	2960	1498308	131972
To Belgium	2539	1283088	106887	6087	3106186	278500
To Hamburg and Bremen	2818	1361556	141142	3894	1967202	185749
To Sardinia and Austria	1939	955114	85052	4483	2258214	200411
To Sweden	.....	.....	.....	1525	770761	66026
To Mexico	.....	.....	.....	635	667006	14628
Total to other foreign ports	10196	5052846	446375	19584	10267577	877286
Grand total	340311	169204614	14555803	335363	169281195	14592414

Comparative Exports of Cotton and Rice from the port of Charleston.

Exported to	S. Isl'd.*	Upland.*	Rice.*	S. Isl'd.†	Upland.†	Rice.†
Liverpool	14,412	186,548	1,544	13,881	144,997	3,865
Scotland	118	2,817	4	106	3,232	.....
Other British ports	.....	207	1,143	199	555	3,339
Total Great Britain	14,530	189,572	2,691	14,186	148,784	7,204
Havre	4,150	61,831	1,628	3,966	33,580	5,630
Marseilles	.....	72	.....	.....	734	.....
Other French ports	.....	4,603	619	.....	2,965	1,552
Total France	4,150	66,506	2,247	3,966	37,279	7,182
Holland	.....	2,611	756	.....	2,202	139
Belgium	.....	4,878	314	2	3,029	2,154
North of Europe	.....	6,211	2,295	.....	7,408	7,447
Total North of Europe	.....	13,700	3,365	2	12,639	9,740
South of Europe	.....	27,020	.....	.....	18,901	.....
West Indies, &c	.....	.....	17,657	.....	.....	22,152
Total foreign ports	18,680	296,798	25,960	18,154	217,603	46,278
Boston	120	12,065	4,383	391	16,321	6,766
Rhode Island, &c	.....	711	.....	.....	493	.....
New York	5,651	157,106	32,545	6,140	148,438	41,050
Philadelphia	.....	19,118	5,767	81	12,934	4,735
Baltimore and Norfolk	.....	9,393	7,512	.....	12,387	10,197
New Orleans, &c	.....	.....	17,142	.....	.....	16,176
Other U. States ports	.....	60	236	.....	102	547
Total coastwise	5,771	198,453	67,585	6,612	190,675	79,461
Grand total	24,451	495,251	93,545	24,766	408,278	125,749

* From Sept. 1, 1854, to Aug. 31, 1855. † From Sept. 1, 1853, to Aug. 31, 1854.

Comparative exports of rough rice and lumber from the port of Charleston.

Exported to—	R. rice.*	Lumber.*	R. rice.†	Lumber.†
	Bushels.	*Feet.*	*Bushels.*	*Feet.*
Liverpool	17,740	663,542	47,243	453,393
London	24,000	.....	49,296	.....
Other British ports	.....	.....	.....	506,011
Total to Great Britain	41,740	663,542	96,539	959,011
Havre	.....	28,767	.....	64,281
Bordeaux	.....	829,239	13,122	97,233
Other French ports	.....	285,296	.....	169,196
Total to France	.....	1,143,302	13,122	330,710
North of Europe	24,326	467,385	154,284	648,472
South of Europe	.....	3,038,771	.....	1,265,408
West Indies, &c	.....	2,025,653	100	3,526,651
Total to foreign ports	66,066	7,338,653	264,045	6,720,645
Boston	.....	1,623,466	.....	4,190,779
Rhode Island, &c	.....	6,405,655	.....	4,846,103
New York	6,502	1,135,198	43,385	1,428,361
Philadelphia	.....	3,538,205	.....	2,993,416
Baltimore and Norfolk	.....	2,577,531	.....	2,799,369
Other United States ports	500	1,236,709	15,634	858,977
Total coastwise	1,002	16,531,764	59,019	17,114,005
Grand total	73,068	23,852,417	323,064	23,844,650

* From Sept. 1, 1854, to Aug. 31, 1855. † From Sept. 1, 1853, to Aug. 31, 1854.

Exports of Cotton from Savannah.

Ports exported to.	S. Isl'd*	Upland.*	S. Isl'd †	Upland.†
Liverpool	6,851	165,142	3,269	85,452
Other British ports	.....	.....	284	3,358
Total Great Britain	6,851	165,142	3,553	88,810
Havre	142	7,964	308	6,179
Other French ports	.....	.....	.....	.....
Total France	142	7,964	308	6,179
Other foreign ports	.....	3,088	.....	3,591
Total foreign ports	6,993	178,194	3,861	98,580
Boston	208	47,241	135	41,156
Providence	.....	3,532	.....	4,191
New York	6,220	113,642	7,446	111,901
Philadelphia	.....	19,666	2,696	24,299
Baltimore and Norfolk	.....	4,761	.....	5,548
Charleston	1,036	6,432	1,390	15,881
Other United States ports	.....	450	.....	387
Total coastwise	7,474	195,714	11,667	203,363
Grand total	14,467	373,908	15,528	301,943

* From Sept. 1, 1854, to Sept. 1, 1855. † From Sept. 1, 1853, to Sept. 1, 1854.

Exports of Rice and Lumber from Savannah.

Ports exported to.	Rice.*	Lumber.*	Rice.†	Lumber.†
	Casks.	*Feet.*	*Casks.*	*Feet.*
Great Britain	4	10,743,600	2	16,257,100
St. Johns and Halifax	.....	1,951,386	10	7,556,400
West Indies	5,145	2,913,022	6,737	2,023,900
Other foreign ports	.....	3,396,300	905	1,516,200
Total foreign ports	5,149	19,004,308	7,654	27,353,600
Maine	.....	1,931,700	.....	8,502,800
Massachusetts	1,445	639,400	2,487	5,828,700
Rhode Island, &c.	.....	41,000	.....	130,000
New York	3,578	1,527,959	12,219	4,452,200
Philadelphia	803	587,800	5,972	616,500
Baltimore and Norfolk	117	641,413	192	1,269,900
Charleston	31	.....	331	.....
New Orleans, &c.	100	.....	1,863	.....
Other ports	.....	1,017,282	30	1,712,100
Total coastwise	3,074	6,486,554	23,094	22,502,100
Grand total	8,223	25,490,862	30,748	49,855,700

* From Sept. 1, 1854, to Sept. 1, 1855. † From Sept. 1, 1853, to Sept. 1, 1854.

Comparative Receipts, Exports, and Stocks of Cotton at the port of Savannah, from September 1 to date.

Years.	Receipts.	Exports.	Stocks.
1845	189,076	186,306	5,922
1846	236,029	234,151	7,787
1847	245,496	243,233	10,050
1848	406,906	405,461	11,500
1849	340,025	341,700	9,599
1850	312,294	317,434	4,500
1851	351,518	353,068	2,950
1852	345,363	343,163	5,150
1853	315,521	317,471	3,200
1854	388,366	386,385	1,981

JOURNAL OF EDUCATION.

SOUTHERN EDUCATION FOR SOUTHERN YOUTH.

The Hon. John Perkins, jr., of Louisiana, one of the ablest and most laborious members of the last Congress, who, we sincerely regret to learn, has declined a re-nomination in his district, in reply to an invitation to address the societies of Centenary College, refers as follows to the great mistakes which are made in regard to the education of southern youth, and interposes suggestions which will awaken a response in the breast of every reader of the Review.

I feel deeply the importance of educating our young men at the south, and had circumstances permitted, I should have been pleased to embrace the occasion of an address at your commencement, to express myself freely on the subject. I have long made it a point to watch the issues of the northern press, and the past year I purchased a full course of northern school and college books, such as are in most general use, and it seems to me impossible for a youth to be pressed through them and retain just feelings towards the south, or proper ideas of its rights under the Constitution. From the frightful pictures of slaves at work under the lash, which ornament the child book, up to the sickly sentimentalism of their class readers, and on through the "higher law" reasoning of "Hicock's Moral Science," there is a constant effort to impress the youthful mind with the idea that slavery is a *great sin*, for the existence of which every American citizen is responsible until Congress acts upon the subject. The compends and condensed commentaries upon the Constitution, prepared for schools and business men, and the only ones generally read by their divines and the great mass of the people, are just such as are fitted to confirm these early im-

pressions. I have in my library some eight of them, prepared under different names, and they all gloss over and misrepresent—in a manner calculated to deceive—the rights of the slaveholder under the Constitution; while they enlarge and artfully magnify, by every possible construction, the degree of power given to the federal government over the subject. To my mind, the certain result of all this in the future is plain. The free States have now the ascendancy in the government. In less than five years, issues of the gravest character will have to be decided in Congress. There will be something more at stake than the money value of southern slaves. To the south it will be a question of existence.

When that time comes I prefer to have the young men of the south prepared to speak from conviction of the wisdom and policy of our peculiar institutions. I do not desire their judgment won over by a perverted moral sentiment or by fictitious appeals to their passions. To confess that slavery is a great social and political evil, is to prepare for battle by throwing away our arms. It is worse—it is to plead guilty and ask for mercy.

There is a philosophy at the bottom of this subject which is well treated of in some of the French works on the organization of labor, and which should be particularly pressed upon our attention at this time, by the growing conflict between capital and labor at the north, dividing whole communities into classes, engendering hatred between trades, and sowing animosity and jealousy and ill-will between the rich and the poor to a degree, that one living at the south, and rarely thrown into the maelstroms of the northern cities, cannot conceive. There is a work recently published by Mr. Fitzhugh, of Virginia, called "Sociology for the South," which should be in the possession of every southern gentleman. It is full of valuable suggestions on this subject, and without necessarily endorsing every sentiment of the writer, few can read it and fail of being confirmed in their attachment to our peculiar institutions. A southern critic, speaking of this work, has said, with much truth: "The splendor, animation, and crowded population of the northern cities excite, bewilder, and delight southern men and their families. Compared with the calm, easy indolence of their own communities, a painful sense of inferiority depresses them when they go back to their own homes. The difference is as between a magnificent panoramic view, and a dark still landscape; life in action, and life in repose." "Let them be contented," the writer continues, "the work of Fitzhugh

will do much to reconcile them to what they have, and what they are, when he reveals to them the interior view, the miseries of pauperism, with its grim and hideous attendants, its dire degradations as shown in penitentiaries and houses of refuge even for the young."

To these indications of an unhealthy state of society in the north, the writer might have added, the mingling of religion and politics, the open profligacy charged by persons of reputed high character one against the other, and seemingly credited; the almost utter absence of anything like devotion to principle in political matters; the power of vice, of almost every description, to command respect by surrounding itself by wealth; and, beyond all, and, perhaps, in a great degree accounting for all, the gradual relaxation in the popular mind of any very strong religious faith. The Calvinistic churches of the Puritans have gradually gone off, first into Unitarianism, then into Universalism, and then into a higher transcendentalism, equivalent with Pantheism in religion, and higher-law-ism in politics.

In the law school at Cambridge, the jury for a moot-court is taken from the under graduates of the college, formerly it was selected from the members of the divinity school. A foreign writer, noticing this fact, and speaking of the gradual weakening of religious conviction in the New England mind, pointedly remarks, the reason for this change in the composition of the jury is supposed to be, that there are not ordinarily twelve men in the divinity school who believe in the existence of a God, and recourse has to be had to the ingenuous undergraduates!

It is common to hear it said by the unreflecting, that boys cannot be properly educated at the south, and must be sent abroad, to the north or Europe. There can be no greater error. The history of the country is illustrated by those who have been educated at the south. Washington grew up in a southern State. Jefferson, Madison, Monroe, Tyler, and Polk were educated at the south. Jackson, Taylor, Clay and Scott, received their instruction and formed their characters at the south. We hear also much of sending southern boys north, in order to have their prejudices removed; but we never see northern boys coming south for a similar purpose. It was the advice of Mr. Calhoun, himself a graduate of Yale, and therefore speaking from experience, that boys intending to reside at the south, should be educated at the south.

The character of an institution depends more upon the spirit and bearing of its pupils than upon the learning of its professors. Rich endowments, large libraries, and splendid

cabinets, no more than eloquent instructions, can make thorough and accomplished scholars, in the absence of a noble emulation to excel on the part of students. It does seem to me, that if there was to be a time when a young Louisianian would be roused to exert himself to reflect credit upon a college in his own State, it would be now when a false and perverted public sentiment is making almost impossible to him the prosecuting of his studies in those institutions of the north, which, like Harvard and Yale, from having been the lights of the country and looked to for half a century as the conservators of all that was good and true, have become the centres of an influence upon the mind and literature of the country deeply to be regretted. Instead of resisting they have stimulated the wild public sentiment around them—their professors rushing into anti-Nebraska political and religious meetings, and talking of exchanging their professorial robes for those of the soldiers to do battle in the cause of freedom! Strange language indeed in the connexion uttered—coming from Yale, one of whose best and purest presidents (Dr. Stiles) was at one period of his life a slaveholder, and so far an encourager of the slave trade as to have sent to Africa for a negro.

Harvard University, in its selection of such noted higher law abolitionism as the Hon. Amasa Walker and the Hon. Anson Burlingame as examiners of the classes of political economy, and in its recent deposition of Judge Loring from lecturer in its law schools, because of his honest and manly discharge of duty under the fugitive slave bill, has made a step even beyond Yale College in the effort to keep pace with what is called the moral sentiment (frenzy) of the day. It is with no pleasure I speak in this way of these institutions, for I graduated at Yale, and studied law at Cambridge, and for their presidents I entertain a respect approaching to reverence. Presidents Woolsey, of Yale, and Walker, of Harvard, are good and learned men, and of far too much wisdom, I am persuaded, to sympathise in the displays of some of their adjuncts.

I do not desire to prejudice you against the institutions of the northern States of the Union, nor by an allusion to objectionable influences unfortunately prevailing in them to diminish respect for what of scholarship and philosophy is truly admirable in them, but to awaken a feeling of pride in the fact of your membership of an institution within our borders, which it is a duty to cherish as the light and ornament of the State. While I would not go to the extent of Governeur Morris, of revolutionary memory, and provide by

will against the education, under any circumstances, of a son in a New England State, I feel that I may very properly congratulate you upon being connected with an institution like Centenary College, located in a pleasant and healthy portion of the State, blessed with good and able professors, and annually contributing to the educated mind of the country in an alumni, many of whom are honorably distinguished in all the walks and professions of life.

STEAMBOAT STATISTICS.

The Cincinnati Gazette publishes an interesting statement prepared by W. W. Guthrie, esq., local inspector, showing the number of steamboats in existence on the western and southern rivers, and the number of disasters for the six months ending June 30, 1855. From this it appears that 39 boats were totally lost. The estimated damage to boats was $573,700, and to cargoes $1,229,800. Thirty-one lives were lost. Twelve steamboats were destroyed by fire, 7 were damaged by ice, 52 were sunk or damaged by snags, 5 were damaged by explosion, and 7 by collision. The whole number of boats on western and southwestern rivers are put down at 600. Mr. Guthrie says:

"It is worthy of remark that there has been no explosion or collapse of flue of any boilers manufactured since the passage of the law by Congress of August 30th, 1852, and coming under the reduction of steam pressure. In every instance, the disasters have been from boilers made previous to the passage of that law."

AMERICAN IRON.

Everything at present indicates a prosperous condition of the American iron trade. Our pig iron is now in far better repute and demand than it has been for a long time, and, by the attention of the manufacturers, it has been so improved as to possess all the valuable qualities of the Scotch pig. The Philadelphia American states that the Mount Hope and Hibernian iron mines, in New Jersey, are doing a large business. The rolling mill at Rockaway, N. J., has been enlarged, and is now driven by steam, instead of water power, the steam being generated entirely from the waste-heat of the building and heating furnaces, so that no more fuel is used than under the water power system. The mill is now constantly employed.

GRAIN CROP OF 1855.*

I. Growth of wheat in each State, 1847,-'50,-'55. *II. States in which there is a deficiency of production when compared with consumption. III. Export from the United States* 1847,-'54. *IV. Average production per acre and period of harvesting. V. States producing surplus beyond consumption. VI. European wheat crop.*

The importance of the grain crops is such to every class of the community, that we have taken pains to form reliable estimates from the most available sources, as to the production of the present year throughout the United States. The general result, so far as the wheat crop is concerned, will be highly satisfactory to the whole country; and will show that while we have the greatest abundance for our own population for the next twelve months, we have a liberal surplus for export to Europe and South America.

Some of the States show a product of from one hundred to five hundred per cent. beyond that of 1847, the Irish famine year. This increase is almost incredible, but we think the returns for the current year will fully bear us out in our estimates, namely:

Estimated production of wheat in some of the old as well as the new States and Territories in 1855, *compared within* 1847 *and* 1850, *showing the vast increase in the supply.*

	1847.	1850.	1855.
	Bushels.	Bushels.	Bushels.
North Carolina	2,350,000	2,130,102	4,000,000
South Carolina	1,300,000	1,066,277	3,000,000
Georgia	1,950,000	1,088,534	4,000,000
Tennessee	8,750,000	1,619,386	8,000,000
Missouri	1,750,000	2,966,928	7,000,000
Illinois	4,900,000	9,414,575	16,000,000
Indiana	7,500,000	6,214,458	12,000,000
Iowa	1,000,000	1,530,581	8,000,000
Wisconsin	1,200,000	4,286,131	7,000,000
California	.....	17,328	3,000,000
Minnesota	.....	1,401	8,000,000
Kansas	.....	.....	1,000,000
Oregon	50,000	211,943	1,500,000
	30.750,000	30,457,044	77,500,000

1847 to 1850, no increase.
1850 to 1855, increase 120 per cent.

In the following tables, to which we direct the careful attention of the reader, it will be found that we differ materially from the calculations or estimates of some of our contemporaries. The latter were prepared without full research into the probable production of each State. The estimates were upon crude materials.

Nothing can demonstrate more strongly the present productive powef and the prospective wealth of the *Great West*, than the official tables of the grain crop of that region. From reliable data we show that Illinois alone will produce this year 6,000,000 of bushels of wheat, or nearly one-tenth of the whole crop of the country. Ohio, 20,000,000; Indiana, 12,000,000; these three States producing more than one-fourth of the whole.

* From The Banker's Magazine, New York, September, 1855.

Although the States west of the Mississippi do not at present make much show in the cereal crops, they will soon exhibit a stronger position. Missouri, Iowa, and Minnesota will, in a few years, produce as largely as Indiana, Illinois, and Michigan.

Our first table is a comparative exhibit of the product of the years 1847, 1850, and 1855, namely:

I. Estimate of the growth of wheat in the different Territories in 1855, *as compared with the production of* 1847, *as per Patent Office Report; and* 1850, *by Census returns, viz:*

	1847. Bushels.	1850. Bushels.	1855. Bushels.
Maine	890,000	296,259	400,000
New Hampshire	610,000	185,658	250,000
Vermont	664,000	525,925	700,000
Massachusetts	256,000	31,221	100,000
Rhode Island	4,500	42	.....
Connecticut	125,000	41,762	30,000
New York	14,500,000	13,121,498	15,000,000
New Jersey	1,100,000	1,601,190	2,500,000
Pennsylvania	14,150,000	15,367,691	1c,000,000
Delaware	410,000	482,511	500,000
Maryland	4,960,000	4,494,680	6,000,000
District of Columbia	.....	17,370	20,000
Virginia	12,000,000	11,232,616	15,000,000
North Carolina	2,350,000	2,130,102	4,000,000
South Carolina	1,300,000	1,066,277	3,000,000
Georgia	1,950,000	1,088,534	4,000,000
Florida	.....	1,027	150,000
Alabama	1,200,000	294,044	2,000,000
Mississippi	500,000	137,990	1,000,000
Louisiana	.....	417	.....
Texas	1,110,000	41,689	1,000,000
Arkansas	200,000	199,639	1,000,000
Tennessee	8,750,000	1,619,386	8,000,000
Kentucky	6,000,000	2,140,822	5,000,000
Ohio	16,800,000	14,487,351	20,000,000
Michigan	8,000,000	4,925,889	7,000,000
Indiana	7,500,000	6,214,458	12,000,000
Illinois	4,900,000	9,414,575	16,000,000
Missouri	1,750,000	2,966,928	7,000,000
Iowa	1,000,000	1,530,581	8,000,000
Wisconsin	1,200,000	4,286,131	7,000,000
Minnesota	.....	1,401	3,000,000
Kansas	.....	.....	1,000,000
New Mexico	.....	196,516	500,000
Utah	.....	107,702	1,500,000
Oregon	50,000	211,043	1,500,000
California	.....	17,328	3,000,000
	114,245,500	100,479,150	175,200,000

These estimates indicate a product of seventy-five per cent. beyond that of 1850, and one hundred and seventy-five millions in the aggregate. If we allow 3½ bushels of wheat per head annually, or one hundred millions of bushels for home consumption, we shall then have on hand, for export or future stock, about seventy-five million bushels.

The New England States and some of the southern States are indebted to the west for their wheat and flour; and here the "harmony of interests" is beautifully demonstrated. The cotton of the south and southwest, and the cotton fabrics of New England, go far to compensate the west for this indebtedness. The deficiency in these few States we estimate at about twelve million bushels, namely:

II. States in which there is a deficiency in the quantity produced for consumption, allowing 3½ bushels to each inhabitant in the manufacturing, and 3 bushels in other States:

	Quantity produced. Bushels.	Consumed. Bushels.	Deficiency. Bushels.
Maine	400,000	2,100,000	1,700,000
New Hampshire	250,000	1,225,000	975,000
Vermont	700,000	1,200,000	500,000
Massachusetts	100,000	3,850,000	3,750,000
Rhode Island	.....	800,000	800,000
Connecticut	80,000	1,500,000	1,420,000
Deficiency N. E. States, bushels			9,145,000
District of Columbia	2,000	250,000	230,000
Florida	150,000	325,000	175,000
Alabama	2,000,000	2,400,000	400,000
Mississippi	1,000,000	2,500,000	500,000
Louisiana	.....	2,000,000	2,000,000
Total deficiency in ten States..			12,450,000

III. As a vast source of income, and as a means of paying a heavy indebtedness to Europe, let us look at the aggregate value of our export of bread tariffs. And in this exhibit, we certainly have cause for congratulation, namely:

Exports of breadstuffs and provisions from the United States to foreign countries, for each fiscal year, from 1846 to 1854, namely:

1846	$27,701,121	1851	$21,948,651
1847	68,701,921	1852	25,857,027
1848	37,472,751	1853	32,985,322
1849	38,155,507	1854	65,901,240
1850	26,051,373		

IV. We must look to the Mississippi valley, and to the really *far west*, (Texas and Oregon,) for prolific soils. In order to show the relative productiveness of the several States, we have examined the subject carefully, and we think the following conclusions are very near the truth:

Table showing the average number of bushels per acre and the time of harvesting in each of the principal wheat growing States:

States.	Average per acre.		Time of harvesting.		
Maine	7 to 12	bushels.	Aug.	10 to Aug.	20.
New Hampshire	12 to 20	do	Aug.	1 to Aug.	10.
Massachusetts	10 to 20	do	July	25 to Aug.	10.
Vermont	15 to 25	do	Aug.	10 to Aug.	20.
New York	10 to 20	do	July	15 to Aug.	20.
New Jersey	15 to 25	do	July	1 to July	10.
Pennsylvania	12 to 25	do	June	20 to July	10.
Delaware	12 to 20	do	June		
Maryland	10 to 20	do	June	to July	1.
Virginia	10 to 20	do	June	15 to June	10.
North Carolina	8 to 15	do	June	10 to June	25.
South Carolina	8 to 12	do	June	1.	
Georgia	8 to 12	do	June	1.	
Alabama	8 to 15	do	June	1 to June	20.
Tennessee	8 to 12	do	June	10 to June	20.
Kentucky	12 to 15	do	July	1.	
Ohio	10 to 20	do	July	1 to Aug.	1.
Indiana	12 to 30	do	June	20 to July	20.
Illinois	12 to 25	do	June	1 to July	25.
Michigan	15 to 25	do	July	10 to July	30.
Iowa	19 to 30	do	July	10 to July	25.
Wisconsin	15 to 25	do	July	15 to July	30.
Texas	20 to 30	do	May	15 to June	15.
Oregon	20 to 25	do	Aug.	1 to Sept.	1.

Many of our readers live "from hand to mouth," and few take the pains to collect, compare, and preserve the current statistics of the day—those that have an important bearing upon the vital interests of society. Hence we shall find that few persons can recollect the famine or short years, or the surplus years. To refresh the memories of our readers, we will recur to the leading features of the past few years, as to the grain crops.

The spring of 1846 was remarkably favorable for wheat and all cereals. The supply for 1846–'47 was extraordinary, and enabled us to export largely to Great Britain. Many cargoes were sent to relieve the suffering Irish.

In 1848 and 1849 the foreign export of breadstuffs declined, and in the latter y ear our agricultural interests were neglected; thousands rushed to California, forgetting that our wheat and corn, our iron and coal, were and still are of more value to us than the gold crop. Hence the product of cereals was barely sufficient for our own uses; and the year 1850 revealed the fact that the production of wheat had actually fallen off, as compared with 1847.

The winter wheat of 1854 was nearly half destroyed by the weevil in Ohio, Pennsylvania, Illinois, Indiana, and northwest Virginia, both before and after being harvested. The drought injured the late crops, and thus caused a heavy demand upon wheat *as food*. The aggregate product was within nine millions of bushels.

The year 1855 has exhibited remarkable weather—no previous season has been more propitious—and we think we have a grand result of *one hundred and seventy-five millions* of bushels for consumption, export, and for seed.

V. In a small number of States the product and consumption of wheat are nearly equal; but with the majority there is a large surplus. These latter we enumerate in the annexed summary, with a resulting excess of ninety-five millions of bushels, namely:

States and Territories where there is a surplus produced beyond the consumption required for each.

	Quantity produced. Bushels.	Consumed. Bushels.	Excess. Bushels.
New York	14,500,000	12,200,000	2,300,000
New Jersey	2,500,000	1,800,000	700,000
Pennsylvania	18,000,000	9,000,000	9,000,000
Delaware and Maryland	6,500,000	2,500,000	4,000,000
Virginia	15,000,000	4,500,000	10,500,000
N. Carolina, S. Carolina, and Georgia	11,000,000	7,700,900	3,300,000
Texas and Arkansas	2,000,000	1,300,000	700,000
Tennessee	8,000,000	3,000,000	4,700,000
Kentucky	5,000,000	3,000,000	2,000,000
Ohio	20,000,000	9,000,001	11,000,000
Michigan and Wisconsin	14,000,000	2,800,000	11,200,000
Illinois	16,000,000	4,000,000	12,000,000
Indiana	12,000,000	3,800,000	8,200,000
Iowa and Minnesota	11,000,000	2,000,000	9,000,000
Missouri	7,000,000	2,500,000	4,500,000
Kansas, New Mexico, and Utah	3,000,000	700,000	2,300,000
California and Oregon	3,000,000	1,800,000	1,200,000
Total			96,600,000
Deduct:			
Deficiency in ten States		12,450,000	
For seed and stock		20,000,000	32,450,000
Surplus for export, bushel			64,150,000

VI. We must not lose sight, however, of the fact that the harvest in Europe is very flattering. In Austria the harvesting of the grain crops commenced about the middle of July, and, with the exception of a few localities, the yield will be abundant.

Up to the last two weeks no signs of the potato disease have appeared in any of the German States.

The Prussian government has recently made inquiries in relation to the crops

in all the districts of the provinces; the result promises an abundant yield of wheat, while rye will scarcely be an average yield.

In Egypt the fields promise a highly abundant crop, and the only fear latterly expressed was an overflow of the Nile and the damage of their harvests.

We defer until another day any calculations as to the demand abroad for American breadstuffs, and as to the home value of flour for some months to come. The European demand will be in some measure contingent upon the duration of the war.

We see nothing now to dampen the hopes of the product of this year in the United States, and we have abundant grounds for congratulation, north, east, south, and west

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CROPS AND EXPORTS—A BAD PROSPECT FOR CHEAP FLOUR.*

The estimates of the crops are generally large, and of wheat some of the figures run to a high range. It does not appear, however, that the effect of the export demand is taken generally into calculation. At such times as the present the public feel the necessity of some statistical data in relation to the actual products of the soil. The *guesses* indulged in as to the product of each and all the States are of no value. Unfortunately, however, the census of the United States give the only approximation, and it is only by comparing these returns with the actual export and current prices that the available crop can be estimated. These, for the two last enumerations, were as follows:

	Population.	Wheat crop. Bush.	Wheat exported. Bush.	Exp't val. Per bush.
1840.....	17,669,653	84,827,272	11,198,365	$1 05
1850.....	23,267,723	104,799,230	8,656,982	1 02

The product per head in 1840 was 5 bushels, and in 1850, 4½ bushels. In the year 1847, the United States wheat crop was estimated as a large one, and that year was known as the "famine year" abroad. The Commissioner of Patents made, in that year, from the best authorities at his command, the following estimate in relation to the wheat crop:

Crop of 1847.....bush.	114,245,500
Seed.....	11,424,550
Surplus.....	102,820,950
Consumption—3 bush. per head.....	62,239,200
Disposable for export.....	40,581,750

Now the fact was that the export reached but 26,312,431 bushels, and that quantity only, being far more than could be well spared, although rising prices diminished home consumption, doubled the price. The following shows the census crop of 1850, the number of bushels actually exported, and the export price in each year since:

	Crop.	Bushels exported.	Price.	Price in England.
1849.....	.....	12,309,972	$1,09	40s.
1850.....	104,799,230	8,658,982	1 02	40
1851.....	114,000,000	13,948,499	0 95	38
1852.....	114,000,000	18,680,686	0 79	41
1853.....	125,000,000	18,958,993	1 05	45
1854.....	85,000,000	27,000,000	1 80	80
1855.....	135,000,000	2,000,000	2 40	75

It is to be observed that the estimate of 114,245,500 bushels by the patent report of 1847, left 40,581,750 bushels for export, allowing no more than three bushels per head for consumption. The fact was that the export of 26,312,431 bushels caused freights to rise to $2 per barrel for flour, and the price in New York from $4 44 to $9 50 per barrel, and the price did not return to its old level

* From the United States Economist.

until 1852. It follows that the crop was not so large as estimated, or that the consumption was much greater. The census gave the crop of 1850 at 104,799,240 bushels, and the population 23,257,720. The result would have been as follows:

Crop, 1850	bush.	104,790,230
Seed		10,479,923
		94,319,307
Export		13,948,499
For consumption	bush.	80,390,803

This would give 3½ bushels per head. The export of 1851, the year ending in June, was, of course, the product of 1850. Now, it appears above, that with a crop of 104,799,230 bushels, of which 13,948,499 was exported, the *price fell*, hence the supply was excessive; but the price in England was very low. The crop of 1853 was very large; of that crop 27,000,000 bushels were exported in 1854. The population in 1854 must have been 26,292,000. Allowing the same consumption per head as in 1850, the crop of 1853 must have been as follows:

Crop	bush.	125,000,000
Seed		12,500,000
Available		112,500,000
Exported		27,000,000
		75,500,000
Consumption, at 3½ bush		92,123,000
Deficit		6,500,000

The result was a very high price, which has since continued. The crop of 1854 was very short. The quantity exported has been smaller than any year since 1837. The consumption has also been less than usual, by reason of the price, which has continued high to the present time. If now we take the crop of 1855, now being harvested, at 135,000,000 bushels, which is a large estimate, the result works thus:

Crop	bush.	135,000,000
Seed		13,500,000
Available		121,500,000
Consumption, 3½ bush		94,670,355
For export		26,921,645

The quantities imported into England are as follows:

	Wheat. qrs.	Flour. cwt.	Total. bush. wheat.	Price.
1850	3,738,995	3,819,440	37,702,280	40s.
1851	3,833,636	5,363,478	46,760,522	38
1852	3,060,208	3,865,174	36,077,666	41
1853	4,949,314	4,646,400	53,533,712	45
1854	.....	.....	26,449,628	80

England imported all she could get in 1854, and the whole supply down to the present moment has not reduced the figure below a famine price. It is to be observed that England, in 1853, took less than half the exports from the United States, and her crop of 1854 was large, added to which, 27,449,628 bushels did not reduce the rates. If now the United States should have 27,000,000 bushels to spare, there seems to be a customer for the whole of it.

Inasmuch as that all kinds of food are very abundant this year in the United States, the consumption of wheat, under an active export demand, may be less than usual. That will result, however, from a high price, and there appears to be no chance of a small price.

A table may be constructed as follows: The consumption of the country, per the census figures of product, population, and exports, for the years 1840 and

1850, and the rate of increase in population being known, the results are as follows:

	Population.	Consumption at 3½ bush.	Actual export.	Crop.	Price in N. York.
1840....	17,060,653	64,565,447	11,198,098	84,827,272	$5 44
1850....	23,267,723	84,182,986	8,817,015	104,479,923	5 62½
1851....	24,023,913	84,483,895	13,948,499	110,032,394	6 68
1852....	24,780,103	86,730,815	18,600,686	117,511,501	4 37
1853....	25,536,293	89,377,025	18,958,993	121,136,048	4 94
1854....	26,293,482	92,023,690	27,000,000	132,023,690	9 25
1855....	27,048,673	94,670,355	2,000,000	110,170,000	9 50
1856....	29,804,863	97,317,020	30,000,000	140,317,000	....

The crop, of course, is that of the previous year, in which the export and consumption take place. Thus the crop now being harvested, if it should reach 140,317,000 bushels, must be consumed and exported during the fiscal year which ends June 30, 1856. The population is calculated at an annual increase of 3¼ per cent., the actual increase between 1840 and 1850 having been 3½ per cent. At 3½ bushels per head the required consumption is as given in the column, but in seasons when other articles are cheap, the consumption will probably be less. It is manifest, however, that the consumption increases largely, and a crop which, in 1851, allowed of a large export at fair prices, was entirely insufficient in 1855.

COLZA OIL.

It may not be generally known that colza oil, made from "*Brassica Oleracea*" of the botanist, is the oil used for the light-houses of the United States, and that the consumption per annum is about 120,000 *gallons*. It is imported from Europe at a cost of over one dollar a gallon.

I understand that Lieutenant T. Jenkins, U. S. N., and one of the light-house staff, (a gentleman perfectly conversant with light-house engineering and their proper and efficient management, having, by practical experience and careful observation, mastered and acted upon the inventions of Bordier Marcet, Fresnel, and the Stevensons,) has endeavored, but without effect, to get some enterprising American to cultivate the plant here.

In the hope that this "pilot" notice will meet with the consideration of some one who is ready to undertake a *safe* and *most remunerating* adventure, I beg respectfully to throw out the following hints regarding its character and cultivation.

Colza is a variety of cabbage, whose seeds afford, from pressure, an oil much employed in France and Belgium for burning in lamps, and for many other purposes. It requires a rich but light soil; it does not succeed upon either *sandy or clayey lands*. The ground for it must be deeply ploughed and well dunged. It should be sown in July, and be afterwards replanted in a richly manured field. In October it is to be planted out in beds, fifteen or eighteen inches apart. It may also be sowed in furrows eight or ten inches asunder.

Land which has been just cropped for wheat is that usually destined to colza; it may be fresh dunged with advantage. The harvest takes place in July, with the sickle, a little before the seeds are completely ripe, lest they should drop off. As the seed is productive of oil, however, only in proportion to its ripeness, the cut plants are allowed to complete their maturation by laying them in heaps under airy sheds, or placing them in a stack and thatching it with straw. The stalks are thrashed with flails, the seeds are winnowed, sifted, and spread out in the air to dry, then packed away in sacks, in order to be subjected to the oil mill at the beginning of winter. The oil cake is a very agreeable and nutritious food for cattle, and serves to fatten them *quickly*. This alone will *defray the cost of the mill*.

I think it proper to state that colza impoverishes the soil very much, as do, indeed, all the plants cultivated for the sake of their oleaginous seeds. It must not, therefore, be come back upon again for six years, *if fine crops are desired*. The double ploughing which it requires effectually cleans the ground.

A. WILLIAMSON.

WASHINGTON, *August* 10, 1855.

MODE OF EXTRACTING TALLOW FROM THE TALLOW TREE.

A few days ago a gentleman residing in Texas addressed the Commissioner of Patents in regard to the tallow tree, and desired to be furnished with the best mode of extracting the tallow. We copy the method recommended by this office:

"The seeds of the tallow tree (*stillingia sebifera*) are picked in China at the commencement of cold weather, in November and December, when all the leaves have fallen. The seeds are, in the first place, taken to the building where the process of making the tallow is carried on, and picked and separated from the stalks. They are then put into a wooden cylinder, open at the top, but with a perforated bottom. This is placed over an iron vessel (about the same diameter, or rather larger than the wooden cylinder, and about six or eight inches deep) containing water, by which means the seeds are well steamed, for the purpose of softening the tallow, and causing it more readily to separate. The furnace has four or five iron vessels in a row, about three feet high, four or five feet broad, and eight or ten feet long. The fire is placed at one end and fed with the husks of the rice, dry grass, and such like cheap materials, which make a great flame, and the flue is, of course, carried directly under the whole of the iron vessels.

"When the seeds have steamed ten minutes, or a quarter of an hour, they are thrown into a large stone mortar, and are gently beaten by two men with stone mallets for the purpose of detaching the tallow from the other parts of the seed. They are then thrown upon a sieve, heated over the fire, and sifted, by which process the tallow is separated, or nearly so, although they generally undergo the process of steaming, &c., a second time, that nothing may be lost. The other part of the seed is ground and pressed for oil.

"The tallow now resembles coarse linseed meal, but with more white spots in it, and derives its brown color from the thin covering over the seed, (between it and the tallow,) which is separated by the pounding and sifting. In this state it is put between circles of twisted straw, five or six of which are laid upon each other, and thus forming a hollow cylinder for its reception. When this straw cylinder has been filled, it is carried away and placed in the press, which is a very rude and simple contrivance, but which, like everything Chinese, answers the purpose remarkably well. The press consists of longitudinal beams of considerable thickness, placed about a foot and a half or two feet asunder, with a thick plank at the bottom, forming a kind of trough, and the whole is bound together with iron. The tallow is pressed out by means of wedges, driven in very tightly with stone mallets, and passes through a hole in the bottom of the press into a tub, which is sunk there to receive it. It is now freed from all impurities, and is a semi-fluid of a beautiful white color, but soon gets solid, and in cold weather is very brittle. The inside of the tubs which collect the tallow is sprinkled or dusted over with a fine red earth, well dried, which prevents the tallow from adhering to their sides. It is thus easily removed in a solid state from the tubs, and in this condition the cakes are exposed for sale in the market. As the candles made from this vegetable tallow have a tendency to get soft and melt in hot weather, they are commonly dipped in wax of various colors, as red, green, and yellow. Those which are intended for religious purposes are generally very large, and finely ornamented with golden characters.

"The cake, or refuse, which remains after the tallow has been pressed out of it, is used for fuel, or to manure the land, and so is the other part of the seed from which oil is extracted."

It may be remarked that this tree has been cultivated in South Carolina for more than a hundred years, and appears well adapted to the climate.

RICE.

We have been politely favored, says the Charleston Mercury, by the Hon. William Aiken, with the subjoined communication from the Hon. J. J. Seibles, our minister in Belgium:

LEGATION OF THE UNITED STATES, *Brussels, July* 21, 1855.

DEAR SIR: I send you enclosed an extract from the Journal des Debats, (Paris,) which I have thought might contain information of importance to you gentlemen

of the United States engaged in the culture of rice. If two crops from one planting can be gathered in Egypt, I don't see why the same result might not be obtained in the United States.

Our consul general at Alexandria—a gentleman formerly of your State, (Mr. Edwin DeLeon,) doubtless well known to you—could, and no doubt would, with pleasure, procure you any information that you would seek in reference to the matter.

With great respect, your very obedient servant,

J. J. SEIBELS.

Hon. WILLIAM AIKEN, *Charleston, S. C.*

The extract alluded to above, from the Journal des Debats, is as follows:

Our last advices from Alexandria report a fact which, at the same time in possibly exercising a great influence in the condition of Egypt, presents also a great deal of interest in a scientific and economical point of view. It is the discovery of a new system of culture by which two successive crops of rice are obtained by a single sowing, and in the same space of time as it takes ordinarily to produce one crop. The inventor of this system is a learned professor of agriculture, of Venice, Mr. Jerome Lattis, who went two years ago to Egypt to carry out on a large scale his valuable discovery. Notwithstanding the difficulties that he was necessarily doomed to encounter in a country governed by routine, he nevertheless, as early as last year, succeeded in obtaining from S. A. Mustapha Bey, son of the late viceroy, Ibrahim Pacha, permission to try his system on one of his lands in the environs of Alexandria. The experiment was eminently successful, and the working men among the natives and the Europeans have verified the existence of the double crop promised by the inventor.

In the meanwhile, Said Pacha ascended the throne, and one of his first acts was to call Mr. Lattis and grant him a firman brevet (patent) for seven years, and request him at the same time to apply his new system of culture to his lands of Destene and Beyrouth. This example set by his highness induced large landholders, native and European, to adopt the Lattis system, and, since two months, 2,000 feddams of ground have undergone its application. All the rice produced by the new system has already borne the ears with a precocity unknown in the country, and will, consequently, give the first crop towards the middle of July, while the sowing done under the old system generally matures at the end of October.

By the results already known the problem can be considered as solved, and the invention of the new mode of cultivation in creating a new source of public riches, will have also well deserved from humanity in contributing to the solution of the great question of substances.

REMEDIES FOR DISEASES OF CATTLE.

Redwater.—Bleed (says Youatt) first, and then give a dose of 1 lb. of Epsom salts, and ½-lb. doses repeated every eight hours until the bowels are acted upon. In Hampshire they give 4 oz. bole armenian and 2 oz. of spirits of turpentine in a pint of gruel.

Blackwater is the concluding and commonly fatal stage of redwater.

Cleansing drink.—1 oz. of bayberry powdered, 1 oz. of brimstone powdered, 1 oz. of cummin-seed powdered, 1 oz. of diapente. Boil these together for ten minutes; give when cold in a gruel.

Colic.—The best remedy is 1 pint of linseed oil mixed with ½ oz. of laudanum.

A cordial is easily made by 1 oz. of caraway seeds, 1 oz. of aniseeds, ½ oz. of ginger powdered, 2 oz. of fenugreek seeds. Boil these in a pint and a half of beer for ten minutes, and administer when cold.

Diarrhœa.—Give ½ oz. of powdered catechu, and 10 grs. of powdered opium, in a little gruel.

Dysentery.—The same as for diarrhœa.

Fever.—Bleed; and then if the bowels are constipated, give ½ lb. of Epsom salts in three pints of water daily, in gruel.

Hove or Hoven.—Use the elastic tube; as a prevention, let them be well supplied with common salt, and restrained from rapid feeding when first feeding upon rank grass or clover.

Mange.—½ lb. of black brimstone, ½ pint of turpentine, 1 pint of train oil. Mix them together, and rub the mixture well in over the affected parts.

Milk fever, or Garget.—2 oz. of brimstone, 1 oz. of diapente, 1 oz. of cummin-seed powdered, 1 oz. of powdered nitre. Give this daily in a little gruel, and well rub the udder with a little goose grease.

Murrain.—½ lb. of salts, 2 oz. of bruised coriander seed, 1 oz. of gentian powder. Give these in a little water.

Poisons swallowed by oxen are commonly the yew, the water dropwort, and the common and the water hemlock. 1½ pints of linseed oil is the best remedy.

Purge, in Poisoning.—Either 1 lb. of salts in a quart of water or gruel, or a pint to a pint and a half of linseed oil.

Sprains.—Embrocation: 8 oz. of sweet oil, 4 oz. spirits of hartshorn, ½ oz. oil of thyme.

Sting of the Adder or Slowworm.—Apply immediately to the part strong spirits of hartshorn; for sting of bees, apply chalk or whitening mixed with vinegar.

Worms.—Botts; give ½ lb. of Epsom salts, with 2 oz. of coriander seed bruised in a quart of water.

Yellows.—2 oz. diapente, 2 oz. of cummin seed powdered, 2 oz. of fenugreek powdered. Boil these for ten minutes in a quart of water, and give daily in a little gruel.

HORSE AND MULE POWER.

ON THE COMPARATIVE ECONOMY AND VALUE OF HORSE AND MULE POWER, BY J. S. SKINNER.

Review of the premiums offered by the Agricultural Society of Prince George's county, Maryland.

For the best Jack, $5; *for the best Jenny*, $5; *for the best pair of mules*, $5.

The prejudice against the mule seems to be as inveterate as that which impels the "heel" of every son of Adam to "bruise the serpent's head," whether it be the head of the innocent water or the harmless black snake, or the viper or copperhead, bloated with poison. Does this aversion to breeding mules owe its origin, too, to a divine command—"thou shalt not let thy cattle gender with a diverse kind?" But the same prohibitory command addressed to the Jews forbade also the "mixing of seed," yet who deems it therefore unchristian to mingle the seed of clover and timothy?

Instead of this invidious distinction by the committee in favor of the horse, offering the highest premiums for that very expensive animal in all his ages, forms, and sexes—young and old, quick and slow, male and female—it were better, we should think, to have held up the highest premium to him whose *mule power* should bear the greatest, and *horse power* the least proportion the one to the other, in use on his plantation! As for rewarding the mere exhibition of the "best pair of mules," what length of merit can be discerned in that, unless it be that it implies length of purse to give the highest price? If driven to the ground in the owner's own carriage, in lieu of a pair of $500 Vermont horses, that would be quite a different matter. The mode of taking the last *census* was very defective in many respects. For example, it only gives the number of "horses *and* mules" in the aggregate; while here, at once, is an agricultural problem which requires for its investigation that we should have accurately and separately stated the number of *each*.

Twenty years ago it was estimated that the horses in England consumed the product of twenty millions of highly cultivated acres, and Sir John Sinclair calculated the keep of one horse to be equal to the product of five acres. Let us suppose constant work to be provided, as it should be, for every horse that is kept on a plantation, do not true economy as well as humanity and justice demand that each horse so worked should be well fed? and if so, may not each horse be estimated to consume, at 2½ gallons a day, $56 of corn? Add to this $14 for other provender and shoeing and physicing; and you have an outlay of not less than $75 a year for every work horse, to say nothing of idle brood mares, colts, carriage-horses, and other *non-producers;* a sum for each horse equal to the purchase of a first-rate mule, while the average life of the former will not more than half equal the latter.

Among planters in the south, whose position and circumstances are so identical with those of Maryland, the economy and edvantages of the mule over the horse are universally admitted. The reports of an agricultural society of South Carolina, in relation to this subject, may here be quoted, where it asserts: "The mule is more easily raised than the horse, more able to bear heavy burdens, equally strong for the draft, more patient, equally docile, will live twice or thrice as long, capable of enduring much more labor, will do as much work in the same time, and will not be more than one-half the expense, as they will not eat more than one-half the grain, will make use of long forage which the delicacy of the horse will reject, and will bear the heat full as well, perhaps better."

Should these considerations induce planters to ponder and reflect how far it is expedient to aggravate, by their highest honors and rewards, that natural and costly predilection of our countrymen for horses, which may be said already to amount to a passion, one which had its origin in deeds and days long past of

"———— Christian service and true chivalry,"

but no more congenial with this utilitarian, money-saving age of ours than would be the vagaries of the Knight of La Mancha himself.

The last census (1840) gives for Prince George's county, Maryland, 4,648 horses and mules. This we believe to be much short of the real number. The aggregate of both for the State is returned at 92,220.

It is not extravagant to assume that 60,000 horses in Maryland might be well superseded by mules, and taking only $10 as the clear saving for each, here would be a reduction of annual expenditure; in other words, an increase amounting to $600,000, equal to the interest on the State's debt.

In all steady continued draft, as in threshing, grinding, and other machinery, now so much in vogue, the excellence of the mule is most remarkable, and especially in his less liability to gald, an evil to which the horse is peculiarly subject where his locomotion in harness is *circular*. On their value in service that consists of constant, steady hauling, an extract may here be made from some editorial remarks in an old volume of the American Farmer, then conducted by Mr. Skinner, now of Washington. Speaking of the decided preference given by the late General Ridgely, of Hampton, to the mules in the heavy hauling connected with his iron works, it is observed: "For some time the general indulged an old servant in keeping a single team of horses, but it was found that the mule teams performed their day's journey, hauling eqnal weight, sooner than the horses by an hour; and the greater value of the mules has been so well established, in the course of his ample experience, that they have superseded horses, with entire conviction of the great saving accomplished by the change. This information, first derived from his manager, Mr. Green, was fully confirmed by the general himself."

Why, then, let it be repeated, in reference to those two animals, make fish of one and flesh of the other, offering $76 in premiums for the horse, and $15 only for "jack, jenny, and mules," and that, too, under the authority and sanction of gentlemen who cannot be too much admired for their public spirit and honorable intentions, nor too closely imitated in their individual practice and general management?

As to the more general use of the mule in light harness for the road, the common impression is that he cannot be made to *travel fast enough*. Nobody likes rapid motion more than the writer of these crude but well meant strictures; and he would like to inquire, who has given to this neglected hybrid a patient and fair trial, to see how much his speed may be improved? Let it be considered how long it takes to bring a crack trotter such as Ripton and Confidence to his best. Hiram Woodruff or Bill Wheelan, the American Chifneys among trotting jockies, never think of taking a horse in hand to train him for this pace until after he reaches his sixth or seventh year, and can hardly be said to get to their best work until they fall into their teens. Old Topgallant performed his *chef d'œuvres* after he was twenty. When the mule has been in like manner taken up, and systematically trained for the trot, and it is found that he cannot be driven at the rate of eight miles an hour, it will be time enough to pronounce him impracticable in that pace; but the writer knows him to be master of that rate, for he has ridden with two others besides General James Shelby—who drives nothing else in his private carriage—from Lexington out to his magnificent blue grass farm, eight miles from Lexington, behind two mules, of about fifteen hands, within the hour,

and without a touch of the whip, and learned from the general that he had driven a pair to the Blue Lick, a distance of forty miles, in six hours, stopping one hour on the way.

In lieu, then, of some of the premiums bestowed on breeding stock, to give animals of slow draft, and on sucking colts, would it not be more politic to lend the countenance of the society to the rearing and more general adoption, for the road as well as for the field, of a more economical and enduring animal power? Might not a premium be well offered in the shape of a set of *knitting needles* in a silver case, or a butter cooler of ground glass, with a cow reposing on its silver lid, to the wife of the planter who shall accompany him to the cattle show in a light carriage drawn by the pair of *best broke mules?*—to the *wife*, because it is doubtful whether, without her ladyship's consent, this great desideratum in rural economy ever can, or perhaps we should add, ever *ought to be achieved*. Were it to be imagined that the fact would have any weight with our republican housewives, it might be added that the medals struck in honor of Agrippina, a heroine whose life was adorned with the most noble virtues, bear on them the image of a mule; and a gentleman at my elbow reminds me that he has seen Charles X. setting out for his royal palace at Fontainbleau, thirteen leagues from Paris, driving six splendid black Spanish mules of Andalusian blood! But it would be a libel, of which I should never be guilty, to suppose that an American matron could be influenced by any motive so strong as her ambition to promote the independence of her husband, and to set to her friends and neighbors an example of economy and good sense.

"Whoso findeth [such] a wife findeth a good thing."

STATE AGRICULTURAL FAIRS.

The following list shows the times and places of holding the agricultural fairs of the different States, so far as they have been appointed:

Connecticut, at Hartford	October 9, 12.
Alabama, at Montgomery	October 23, 26.
Canada East, at Sherbroke	September 11, 14.
Canada West, at Coburg	October 9, 12.
East Tennessee	October 23, 25.
Georgia, at Atalanta	September 10, 13.
Illinois, at Chicago	Second week in October.
Indiana, at Indianapolis	October 17, 19.
Kentucky, at Paris	September 25, 28.
Maryland, at Baltimore	Last week in October.
Michigan, at Detroit	October 2, 5.
New Hampshire	September 12, 14.
New Jersey, at Camden	September 19, 21.
New York, at Elmira	October 2, 5.
North Carolina	October 16, 19.
Ohio, at Columbus	September 18, 21.
Tennessee, at Nashville	First week in October.
Vermont, at Rutland	September 11, 13.
Pennsylvania, at Harrisburg	September 25, 28.
Virginia, at Richmond	October 30, November 2.
Western Virginia, at Wheeling Island	September 26, 28.
Philadelphia Society for Promotion of Agriculture, at Powelton	September 12, 13.

INSECTS INFESTING THE COTTON PLANT.

BY TOWNEND GLOVER, OF THE PATENT OFFICE.

(Illustrated with a lithographic representation.)

In visiting the plantations near Columbia, in South Carolina, in September last, for the purpose of examining the habits of the insects injurious to cotton, the first that attracted attention was the great number of cantharides, a species of blister fly, in the flowers of the plant, feeding upon the nectar or pollen, and,

in many instances, upon the petals themselves. These insects were similar in appearance to the striped potato fly, (*Cantharis vittata*, of Harris,) so destructive to the potato plant in the more northern States. These, however, were much smaller in size than the Cantharis vittata, and rather different in markings and color. Several small cantharides of an ash or rusty greyish color, more or less marked with stripes, were also found devouring the petals at the same time.

A species of chauliognathus (*Chauliognathus pennsylvanicus*, of De Geer) was found in similar situations in great numbers, but did not appear to attack the petals like the above mentioned cantharides, and, as far as observed, contented itself with the nectar in the interior of the flowers.

A leaf beetle (*Galereuca duodecimpunctata*) devours holes in the petals also; but I imagine that none of these insects do much injury to the crops, unless it should be discovered that they pierce the embryo bolls, as several planters assert, although I never observed them in the act. The large green thorny and poisonous caterpillar of the moth saturnia sometimes does considerable damage to the foliage of cotton plants during the latter part of August and the beginning of September. It also devours the leaf of the Indian corn. These caterpillars inflict very painful wounds with their spines if handled incautiously. As they do not appear to be very numerous, however, they probably injure the main crop only in a trifling degree. Shaking them off with a stick, and then trampling them under foot, appears to be the only method to destroy this caterpillar

The much-dreaded cotton louse (*Aphis?*) was not found very abundantly at this late season, as the dry, hot weather of the past summer had been unfavorable to its increase; and it is mostly when the cotton plants are very young and tender, or during damp seasons, that the attack of these insects is mostly to be dreaded.

The boll-worm (*Heliothes?*) was not found to be very numerous. It generally does more damage to the crops further south or west. Several of these insects were found, however, on Mr. Moultrie Weston's plantation near Gadsden. Their presence was first indicated by the quantity of young bolls and buds which had fallen to the ground and were gradually withering under the plants. Each of these fallen bolls, upon examination, exhibited merely a small puncture on the outside. The inside, however, was either wholly or partially eaten out by the young worms and filled with fæces; but they were not to be found in the inside of these fallen bolls, as their instinct teaches them to escape in time before the boll falls. Whenever the neighboring plant was thoroughly searched, the worm was almost invariably found perforatiug another boll in a similar manner, or resting upon a leaf preparatory to casting its skin, which operation is performed several times before it attains its largest size. When a boll is attacked, the calyx "flares" open in so marked a manner that any experienced planter can determine at one glance such bolls as have been injured; but if the boll be very young, it almost invariably falls to the ground and withers. More damage appears to be done to the crop here by the destruction of these young bolls than is generally supposed, as they are scarcely observed when lying dried up upon the parched soil.

The caterpillar of a butterfly (*Argynnis columbina*) was found upon the cotton plant, but had evidently wandered away from its favorite food, which consists of the wild passion vine, or May pop, (*Passiflora.*) These insects cannot do much, if any, injury to the cotton, as multitudes were afterwards found on the May pop, which is a very troublesome weed to eradicate, and grows profusely in and about the edges of plantations. In October and November the so-called grass worm was very abundant in the cotton and grass lands near Columbus; but it has been stated by the best planters in that neighborhood that it does trifling, if any, damage to cotton, for if the grass and weeds are suffered to grow between the rows, the caterpillars will devour the grass in preference to the cotton. When very hungry, however, they will eat the cotton plant, as I reared about thirty of these insects on cotton leaves alone, although they appeared to prefer grass, if attainable. The perfect moth came out about the 28th of October.

A small green caterpillar of a yellowish brown moth (*Tortrix?*) was found, but not very abundantly, on the leaves, which it rolled up, and thus formed a secure retreat from its enemies, and only issued forth to feed upon the surrounding foliage. The yellowish hairy caterpillar of a species of arctia was also found feeding upon the leaves. The habits of this insect appear to be solitary, and as very few were found, the crop cannot be materially injured by them, at least in this part of the country. Many green smooth-skinned caterpillars of a moth (*Plusia?*)

about an inch in length, were found from the 12th of October to the 2d of November, feeding upon the "blooms" of cotton, in company with others, similar in color and size, but distinguised by a longitudinal band of white on each side. The latter were likewise very destructive to the leaves of turnips, as stated by Mr. C. F. Peabody, of Columbus. Several very slender, brownish span-worms, about half an inch in length, were observed upon the "blooms" of cotton in September and October, but as these insects merely eat small holes in the petals, they cannot do much harm.

Another caterpillar, from about an inch to an inch and a half in length, and of a beautiful dark velvety appearance, with longitudinal yellow stripes, appeared to have the same habit of burrowing into the bolls in a similar manner as the so-called boll-worm, but was not sufficiently numerous to injure the crop.

A small beetle (*Cetonia melancholica,*) of a greenish metallic cast, barred with dirty cream color, was found in the holes already pierced by the boll-worm, in September and October. These insects appeared merely to frequent such places for the extravasated sap which exudes from the wounds previously inflicted by the worm. They were never observed actually boring into the bolls, but were very numerous in such places. As many as five were taken from one boll where the sap was flowing very freely.

(Several insects (*Pentatoma* and *Anisoscelis*) were very abundant in the cotton-fields, both on the bolls and leaves, which have been accused of piercing the young bolls for the sake of the juice; but as none were observed in the act, it cannot be stated definitely whether they actually do harm or not before their habits have received further investigation.

The cotton louse (*Aphis?*) made its appearance again during the cold, damp weather in November, but too late to do much harm.

Among the insects observed to be beneficial to the planter was the lady-bird, (*Coccinella?*) plate 8, which, both in the lava and perfect state, devours myriads of cotton lice. The grub, or maggot-like larva, of the syrphus sucks out the juices of the plant lice, and thus destroys them.

The predatory larva of the lace-wing fly (*Hemerobius?*) also devours multitudes of these pests; and minute ichneumon flies deposit eggs in the bodies of the living aphis, or cotton louse, which, when hatched into grubs, eat out the interior substance of their bodies, and thus destroy them. Other ichneumon flies are ever busy on the wing in search of noxious caterpillars, in the bodies of which they deposit their eggs in a similar manner.

The tiger beetles (*Cicindela?*) and other beetles (*Carabus?*) are constantly roving about to seize and devour such other insects as may be so unfortunate as to happen to fall in their path; and thus has Nature kindly provided one class of insects to live entirely upon others, to keep the noxious ones in check and prevent their too rapid multiplication.

The ants which swarm upon cotton plants merely frequent them for the sake of the sweet sticky substance that is elaborated in the body of the aphis, or cotton louse, and afterwards is ejected upon the leaves, and forms their favorite food. Ants also prove beneficial in many other cases, as they destroy all weak or disabled insects they can overcome.

Spiders, too, are useful in destroying injurious insects on the cotton. Some spin their web from plant to plant, and thus entrap multitudes of unwary flies and moths. Others, again, rove from leaf to leaf, hunting for insect food, upon which they spring with the unerring leap of a beast of prey. In short, almost all insects may be classed as either beneficial or prejudical to agriculture, and all intelligent farmers and planters should be able to distinguish their friends from their foes. The former should be protected and encourged by all the means in their power, whilst it is only by studying the habits and natural history of the others that they may at length learn some effectual methods of destroying them either in the larva, pupa, or perfect states. For, if we consider that one female "miller," or moth, produced early in the spring and allowed to deposit her eggs, is the mother of the myriads of ravenous caterpillars which in the late summer and fall devastate our fields and woods, the necessity of a closer study of her habits will at once be apparent to the most careless observer. The instincts of insects are various, some being attracted by fire or lights, others by sweets; many avoid certain substances; others, again, remain concealed all winter in the stalks of plants, and it is only until a thorough investigation has been made of their habits that any step can be taken effectually to destroy and exterminate them.—[*To be continued.*]

CIRCULAR OF THE STATE AGRICULTURAL SOCIETY.

To the District Societies of the State of South Carolina.

The undersigned, who were appointed an executive committee at the recent meeting of delegates from various portions of our State to form a State Agricultural Society, would respectfully suggest to you the importance of such an object, and earnestly request of you to call on the citizens of your respective districts to unite and form District Agricultural Societies that shall co-operate with the State Society in collecting useful information and disseminating it among the people at large. We also propose to offer annually suitable premiums for the best managed farms, for the most approved breeds of stock, and for the implements of husbandry best adapted to our agriculture; also for the mechanical, artistic, and domestic productions of our citizens; and we hope, by the stimulus thus afforded and the rivalry thus excited, to bring about a gradual and steady improvement, not only in agricultural but in all of the industrial pursuits of our State; and we trust that every citizen of South Carolina, from the humblest to the highest, will zealously enlist in so important and patriotic an undertaking.

To accomplish so laudable an object, it is evident we must have the means, and those, too, of a permanent character. We propose, therefore, to raise, by individual subscription, the sum of twenty-five thousand dollars, ($25,000,) and to petition our legislature for a suitable amount of money, to be invested in stocks paying regular dividends, and to use annually only the income from such investment. To raise the individual subscription, it is proposed that citizens in the different districts, who are disposed to join the State Agricultural Society, shall become life members upon the payment of twenty-five dollars ($25) each, and that the different district societies shall pay annually the sum of two dollars into the treasury of the State Society. From these three sources we hope to raise abundant means. At the late agricultural meeting in Columbia, there were ninety delegates who became life members, and raised, in a few minutes, over two thousand dollars, ($2,000;) and we have every reason to believe that the citizens of the district of Richland and the town of Columbia will raise a like amount, and that the town council will also make liberal donations to the society by providing the grounds and suitable accommodations for the exhibition of stock, implements of agriculture, and the product of the mechanic arts. With such bright prospects before us, we entreat every one to use his exertions to form district societies, to become himself a life member of the State Agricultural Society, and to procure as many other life members as can possibly be obtained. Above all, we invite each district society to send delegates to the agricultural meeting that is to take place in Columbia on the second Tuesday of November next; and we most earnestly request each member of the State society to be punctual in his attendance, for it is not only by an interchange of feelings and opinions on the subject of agriculture, that we can hope to give to it that importance to which it is so justly entitled, and to excite that laudable spirit of rivalry among our district societies, by which they will become honorable competitors in advancing the prosperity of their respective districts, and the means of developing and increasing the agricultural resources of the whole State; we also propose, as soon as a permanent fund shall be provided, to appoint a secretary and treasurer to the State society, who shall take charge of all reports and other communications from the district societies, and publish all that shall be worthy of publication in a weekly or monthly agricultural journal, to be under the control and direction of the executive committee; which journal shall be sent gratuitously to each life member of the State Agricultural Society. Thus, you will perceive, that the district and State societies will be made to co-operate most harmoniously—the one in collecting information, and the other in publishing and diffusing it. We, therefore, most earnestly appeal to you to aid us in carrying out our laudable purposes.

A. P. Calhoun, E. G. Palmer, J. U. Adams, R. W. Gibbes, O. M. Dantzler, R. J. Gage, A. Sumner, executive committee.

CONSTITUTION OF THE STATE AGRICULTURAL SOCIETY OF SOUTH CAROLINA.

1. The name of this society shall be the "State Agricultural Society of South Carolina."

2. Its objects shall be to improve and advance the condition of agriculture and horticulture, and the auxiliary mechanic arts and manufactures.

3. This society shall consist of individual members, upon their paying an annual subscription of two dollars, or twenty-five dollars for life membership; and delegates from such district societies as shall pay an annual contribution of five dollars into the treasury of this society; and that each delegate from such society shall pay a fee of two dollars; and also of such honorary and corresponding members as shall be deemed proper by the society; but no person shall be chosen an honorary member of the society upon any other ground of merit or claim than of distinguished services rendered to agriculture, horticulture, or the mechanic arts.

4. There shall be a president and six vice presidents, and an executive committee, consisting of seven persons, including the president, who shall be annually elected by the society

5. The society shall meet annually in the city of Columbia, on the second Tuesday in November, at which time there shall be an agricultural, mechanical, manufacturing and stock exhibition.

6. A quorum of the society shall consist of not less than fifty members, and the president shall preside at all meetings, and in his absence a vice president.

7. The executive committee shall appoint an individual who shall act as secretary and treasurer, appoint all standing and other committees of the society, and to make agreements for its annual exhibitions.

8. It shall be the duty of the secretary and treasurer to keep and preserve the books and papers of the society; to prepare its proceedings for publication; to revise all communications before they are published; to receive and disburse the funds of the society, under the direction of the executive committee; to edit an agricultural paper to be published by the society, whenever, in their opinion, its publication shall be deemed expedient; and perform all other duties which they may assign to him; for which he shall receive an annual compensation, to be fixed by the said committee.

9. This constitution may be amended by the vote of two-thirds of the members attending any annual meeting.

A PLEA FOR AGRICULTURAL EDUCATION.*

Something over ten years ago, the writer, as chairman of the committee on agriculture in one branch of the New York legislature, embodied some facts and suggestions on the subject of educating practical farmers, which, having been verified by subsequent experience in that large and populous State, may not be unworthy of consideration by southern planters. The report from which we cite may be found in the sixth volume, second series, of the Genesee Farmer for 1845. At that time the best Genesee wheat sold in Rochester at from 75 to 80 cents a bushel, corn at from 37 to 40 cents, and potatoes at 18 to 25 cents. Since then, such has been the increase of population and decrease of the elements of food and raiment in the cultivated land of the State, operating with other less potent influences, that wheat is now selling in Rochester at $2 70 a bushel, corn at $1 10, and potatoes at about the same price. Ten years ago, a poor man working out by the day or month on a farm got a bushel of wheat for a day's work; now he is compelled to give three days' toil for the like quantity of grain, or flour made from the same. In the purchase of potatoes the difference is equally great, and against unscientific labor.

These are pregnant facts, and are by no means peculiar to New York in their most significant aspect. In the document referred to we have labored to show, among other things, the essential difference between working to produce property, as by agriculture, and seeking only to acquire it, after it has been called into existence by the productive industry of others. As a general thing, the latter class is better educated than the former, the producers, who rarely study the science of keeping and using property; hence, it is extremely apt to slip out of their possession. The argument, being addressed to laboring farmers, runs in this wise:

"Surely the toiling husbandman needs, if he do not deserve, as many good meals, as much good clothing, and as fine a house as one that merely studies to acquire, not produce, the good things of this world. Nevertheless, the fact is

* From the Southern Cultivator.

notorious, that the great body of our rural population somehow contrive to work a little harder and fare a little poorer than any other class in the community.

"We learn from reliable statistics that paupers increase among us, relatively, faster than population. The number that live from hand to mouth, only one step from the poor-house, is increasing with fearful rapidity. There are already more than five hundred thousand people in this State wholly dependant on their daily labor for their daily bread. If the legislature will do as much to teach the producing classes how to keep and enjoy the entire proceeds of their honest toil as it does to teach non-producers how to exchange their shadows for the working man's substance, nine-tenths of our growing taxes for the support of the poor and the punishment of crime will cease forever. According to the official report, the direct State tax for the year 1844 was $4,243,100. This will soon be $8,000,000, unless we cease to manufacture paupers, criminals, and needless litigation."

Our southern readers will generally admit that there is something wrong in a system of popular education which yields, as a part of its natural fruit, increasing crops of paupers, criminals, and litigation. Now, as a community consumes the fertility of its cultivated fields, and at the same time increases its population, who does not see that it nourishes in its bosom a thousand seeds of dissatisfaction and malignant discord? After calculating with scientific accuracy the amount of phosphorus in a pauper's brain and nervous system, and the quantity that must yearly enter his mouth taken from the soil, we predicted long ago the present Know Nothing movement against foreign laborers and competitors in New England and New York. The lack of science and the wrong done to arated land are the true sources of a thousand social and political evils. These have their living roots in the earth, and nowhere else. Looking with deep solicitude to the future wants of the children attending our common schools, we said:

"It is not far from the truth to say that 400,000 of the 700,000 children now attending our schools are destined to become practical operatives in the great art of making something into grain, grass, roots, milk, butter, cheese, fat, lean meat, bone, or some of the numerous other products of rural labor. Where that something can be found, and how the raw materials of all cultivated plants should be combined so as to give the largest return for any given amount of capital and labor, are problems in practical husbandry which science alone can solve. The term science is but another name for knowledge. It is, however, usually limited in this connexion to the systematic investigation of the laws of nature; and of all men the practical farmer is most interested in understanding and obeying these wise and salutary laws.

"To make an acre of wheat that will yield twenty bushels, the plants must have twelve pounds of phosphorus. To purchase that amount of this substance, which forms one of the constituents of the human brain, at a druggist's shop, will cost $24. At present prices, the phosphorus and ammonia annually thrown away in the solid and liquid excretions of man and his domestic animals in this State are worth some $20,000,000.

"All the farmers of the Empire State should rise up as one man, and insist that the science of good husbandry and that of keeping property shall be taught in all their common schools. The same mental culture which will enable an honest tiller of the soil to double its products, and double the value of his better directed industry, will also qualify him, in a good degree, to keep and enjoy a much larger portion of the net proceeds of his more skilful industry.

"Science is the greatest leveller in the world, but unlike the levelling of ignorance and brute force, it ever levels upward. It takes the highest point of mental attainment already achieved for its standard, and then wisely and humanely elevates all below up to that standard. The object is to make the triumph of mind over matter universal and complete."

This object is as important at the south as it is at the north, and therefore the argument is not out of place in the Cultivator. Nor is the south entirely free from the tendency to overstock the professions of law and medicine, mercantile, and other unproductive (in one sense) pursuits. Hence, the following historical facts and calmly considered suggestions may be worth the space they occupy:

"It is now twenty-six years since the friends of agricultural improvement first made a vigorous effort to establish an agricultural college in this State. Your committee have before them an essay, published in 1819, in this city, (Albany,) of 42 pages, advocating such an institution with unanswerable arguments. Within the last twenty-six years there has been taken from the public treasury about

$200,000 to prepare candidates for legal honors to study successfully the science of law. We have also four well-endowed medical colleges, now drawing $5,500 a year besides. Indeed, we have so long paid a large bounty on all branches of unproductive industry, so called, that no young man of honorable ambition will consent to toil and sweat and burn in the sun on a farm for $12 a month, when, as a clerk in a store, a bank, a broker's office, or as a student in a doctor's or lawyer's office, he can expect soon to command five dollars to one of the industrious farmer, and with one-fifth of the severe bodily labor. Is it possible for all ambitious young men to become professional gentlemen, and not render these professional pursuits utterly valueless? If learning and science are the great highways to honorable distinction and public favor, why deny these advantages to those who do more than all others to feed and clothe the whole community?"

Planters, think of the education of your sons, and wisely determine what position you will have them occupy in an age of advancing agricultural literature and science. Nothing is easier than to give them an elevated stand-point, whether for making and keeping property, or commanding the suffrages and applause of their fellow-citizens in after-life. Receive not unkindly this hint; it is more than possible to neglect human cultivation. Such neglect will tell injuriously, both on a family and the public at large. Nothing would strengthen southern interests so much as the more general and thorough education of those who own the soil. It is a trite saying that "knowledge is power," but, truism as it is, there are thousands of voters and sovereign rulers who do not understand its bearing on the educational institutions of the country. The improvement of these is, somehow, a most difficult reform to accomplish, although, confessedly, one that is much needed. What is wanted, in addition to all that the public now have, is the plain and effective application of science to all the industrial arts practised by civilized men. Such an application of all the knowledge extant would detract in no respect from its dignity or honor, while it would utilize it a thousandfold. Place science in the heads and hearts of the people, instead of keeping it out of their reach, and they will love and cherish it, as parents do their own children. The real difficulty lies in reaching the masses. It will ever give us pleasure to meet them at their county fairs and county courts, and talk over the true interests of the human family, whether in cultivating man, or the earth from which he was taken and to which his dust must return. If it were possible to talk to the whole people, and explain at length what agriculture most needs at the south, to put to shame northern fanaticism, we feel confident that our humble plea for agricultural education would not be in vain. A kind Providence smiles upon southern tillage, and proclaims the duty of planters to take the lead in the professional instruction of agriculturists on this continent. Do you not feel the inspiration which forbids you to follow the do-nothings at the north, who are fast dividing all their moral and physical powers between fifty conflicting implacable factions? We have studied these factions pretty closely, and might do the public a worse service than to analyze and describe them, but we will not. It is not our mission to complain of popular folly anywhere, but a house divided against itself is in a bad way, whether north or south.

On the important question of promoting agriculture, there is no good reason why public sentiment at the south should not be perfectly harmonious and united. It is so obviously the paramount interest on which all others depend for support, either directly or indirectly, that the only debatable ground is the fact whether any proposed measure will truly benefit southern tillage and husbandry or not. And to this simple, this plain test, we desire to see agricultural education brought. In this matter no one has a right to expect wonders, much less a miracle. Such expectations would most certainly be disappointed. A good crop of useful knowledge was never made by persons so full of excitement as to jump to their conclusions. Our most useful institutions grow up from small germs, like noble forest trees which have extended both their roots and branches, little by little, every summer for one or two centuries. Such institutions are really worth having; but mark, they should grow, else they are like dead trees, which every year become more unsound and less valuable. No college should be permitted to fall into such a condition. Its friends had better engraft new scions upon some of the most flourishing limbs, and add a good mulching to protect the roots. It is wise to rejuvenate or reform, but inhuman to destroy. Gladly shall we assist in any way in our power to build up and strengthen the educational institutions of the south. They need more funds, more pupils, and more able and earnest teachers.

In this way they will happily exhibit substantial progress and solid growth. Whatever the people desire to learn, and have their children learn, educational institutions should teach. We believe they wish to learn the principles of agriculture and of the mechanic arts, and therefore we advocate the study of these branches of knowledge in schools or universities adapted to such utilitarian objects. Our republicanism induces the belief that there is nothing in learning, nothing in science, which is either too good or too high for any common citizen to command if he pleases.

CAN INDIGO BE CULTIVATED WITH ADVANTAGE IN SOUTH ALABAMA?

Although I have once cultivated and prepared it for market, I have no information that can be relied on. There are two kinds, the wild and tame. The wild gives a first cutting in June, and the other late in the fall, and makes the finest dye. The tame gives its first cutting late in July and one after, and, perhaps, the reason of its being preferred is, that it calls for cutting when the making of the general crop is over, when the tame requires it at the busiest time. It is planted in drills, about two and a half feet apart, or more, and where the use of the hoe alone is intended, which is generally the case in new land, at one and a half feet distance. Being in drills, and a great many to the acre, it will be grassy and very difficult to be kept clean; indeed, so much so, that it is almost exclusively grown in new, or first year's land, to avoid grass. It receives a first, second, and third working by flat weeding with the hoe, much as rice is cultivated. When just commencing to mature, and before the seed is ripe, it is cut by hand with the hand-sickle, or rice hook, in the evenings and mornings, and not at midday, as being an extremely tender and delicate plant it wilts too fast. The evening and morning cuttings are immediately carried to the steep vat, where covered under the water and kept down by weights, fermentation rapidly takes place and exudes or separates the sap from the stalks, which are taken out and thrown away. The sap sediment, or exudation in the shape and appearance of mud, is run and scraped through a trough into another vat. This mud must undergo much manipulation to separate its dye from the water. It has to be well worked up with long paddles in the hand, or by rods through a round pole two or three feet long. The poles to be turned by cranks, with journals on their ends, similar to the windlass used in digging wells. Lime water is introduced into this vat to facilitate the separation and to precipitate the feculum. As the mud settles at the bottom, two small augur holes, one above the other, with wooden pin stoppers, let off the clear water from this vat. The mud or dye is scraped up into small flat boxes, carried by hand and placed on stands full of sand, where it drains more thoroughly, and when dry is carried to the dye or indigo house and cut into one or more pound lumps and laid on the shelves to dry more. Laid on a little straw on these shelves allows them to contract a little in drying, as the straw gives to it, which a rough board would not. It is more saleable in lumps than when much broken. When it has a bright copper color it has the evidence of the best quality.

Indigo yields from 20 to 100 pounds to the acre, but about 30 pounds is more common, and sells for from 75 cents to $1 a pound. On new and tolerably good pine land it is made without much trouble, and the vats without expense, and the crop is soon through. It wants a long and a hot summer to perfect the plant and mature the dye, and it is probable that this climate or that of lower Louisiana would be sufficiently so. The indigo of the East Indies is the best made. The Bengal flotant sells for $6 a pound, being cheaper than ours at $1. This is made entirely without the use of lime, for which more manipulation is substituted. It is cut and carried by its growers to the manufactory of the neighborhood, where, with more skill and better means of working it up, a much better article is made. Lime clarifies and precipitates the dye quickly and more in quantity, but at the expense of quality, as it has all to be taken out before it can be used for dyeing. The smell, when the indigo is drying, is strong, but not, I think, unwholesome. It certainly has none of the essense of the otto of roses or cologne about it.

A PLANTER.

Dr. Ramsay, in his history of South Carolina, says that 1,107,660 pounds of indigo were exported just previous to the war of the Revolution.

TURPENTINE.

HINTS FOR THOSE ABOUT TO ENGAGE IN ITS MANUFACTURE.*

SITUATION.—Select your plantation as near a distillery as you can; but you may do a very profitable business six or seven miles off if the country is favorable for hauling. If the distillery is on a river, turpentine may be hauled two or three miles, and rafted down forty or fifty miles, cheaper than to haul to the still over six or seven miles. Yet persons already settled on thin pine lands can do better to make turpentine and haul it ten or twelve miles than at anything else they make for market.

TIMBER.—The best trees are young, thriving, on pretty good soil, of quick growth, having the most sap-wood. If found on low, level, or moist lands, they will yield all the better. Dry seasons are unfavorable for a large crop of turpentine, and, of course, trees on lands that suffer easily from drouth are least profitable. Old yellow pines run badly, and are only worth boxing when standing amidst the better timber.

The thicker the growth stands the better, as close forests are less injured by hard winds than those more open, while the hand has less ground to walk over in attending his task. Forests that will not afford a task of 12,000 boxes on 200 acres or less are hardly worth working unless they are very near the still or water carriage to it.

BOXING.—As the future profit of the business depends chiefly on doing this part of the work well, let it be carefully attended to, observing the following instructions:

1. In our climate (Florida and southwestern Georgia) this work must be done between the 1st of November and the 1st of March, or a little later if the spring is backward and cold, and the turpentine does not begin to run.

2. The boxes must be cut *low down*, in small trees within six or eight inches of the ground, and ten or twelve inches in large trees. This will be at the swell of the roots, where the sap wood is deepest, and the trees less weakened by the cut, and because the drip is more certain to fall into the box when it is cut in the projecting wood. And for this last reason, when the tree is not upright, a box must never be cut on the side to which it leans.

3. The box should be from eight to fifteen inches long, measuring across the tree according to its size. The lower edge or rim of the chop must be a level cut, very smooth, and have a down slope inwards of two or three inches below the outer edge. The depth from three to four inches, capable of holding a quart or more, unless in a small tree. As a general rule, the cut should extend very little into the heart-wood.

4. The size of the tree determines the number of boxes it will bear and keep healthy. Trees under a foot thick should have but one box; those from twelve to twenty inches thick two boxes, and never more than three in any tree. Of course, where the trees are scattering it may be better to cut more boxes, even if the trees do not last as long, than to lose much time with your hands.

5. The task for prime experienced hands is from 450 to 500 boxes a week, or 75 to 80 a day. And some expert hands will gain a day and do their work well. Such hands should be encouraged by receiving pay for extra work. But most beginners will not cut at first more than 50 boxes a day, and there is nothing gained by tasking them too high, until they have got well used to the proper shape and size of boxes.

CORNERING.—As soon as you stop cutting boxes the hands should be set to cutting corners to them. This is done by a straight cut four or five inches up the tree from each corner of the box, and is usually done with two blows of an axe, taking out a chip half or three quarters of an inch deep, which makes a channel to catch the turpentine at the corners of the box, and serves as a guide for the chipping afterwards. A hand will corner 500 or 600 boxes a day. The turpentine from the faces and corners of new boxes will fill them, without further work, for your first.

DIPPING.—This part of the business generally begins about the first of April, a little earlier or later according to the season. But before proceeding to dip, or even to corner your boxes, each task, where there are no natural boundaries, should be marked off by blazing a line of trees. And every task should be further

* From the Alabama Planter.

divided by rows of stakes, fifty yards apart, crossing it both ways, from side to side, which will cut it up into squares of about half an acre. Without this the overseer of several hands cannot possibly inspect their work with any accuracy, nor can the hands, however faithful, avoid skipping a great many boxes in *cornering, chipping, and dipping.*

1. Before you begin to dip, place your empty barrels, thirty-five or forty to the task, at convenient distances, all ready to receive the turpentine.

2. Each hand will require two buckets, holding four or five gallons, so that while one is dipping into the barrel he can work with the other and lose no time. The implement for dipping is made of iron and steel, something like a trowel, with a wooden handle, the blade flat, six inches wide and nine or ten long, with a rounded point, thin at the edges, and a quarter of an inch thick in the centre, and joining the handle.

3. Dipping must commence as soon as the boxes are pretty well filled, charging the hands to watch them, while going over their task to cut corners or to chip, as trees run very unequally, and many will overflow before the rest are full.

4. The number of dippings in a season vary from four to seven as the extremes. Below five, during the first two years, is looked on as poor, and six as very good. An early or backward spring or fall, long drouths, during which the tree almost stops running, or heavy driving rains which fill the boxes with water and float out the turpentine, all have their effect on the number of drippings, which depends otherwise on the frequency and care with which chipping is done. As the plantation grows older, and the chipping extends higher up the trees, you get fewer dippings of *soft* turpentine, and a greater proportion of *hard* or *scrape.*

5. It is not usually necessary to gather the scrape separately until the second winter, after the boxes stop running. It will then be nearly equal in bulk to two dippings. After that it must be gathered every winter, the bulk increasing the longer the trees are tended.

6. For collecting the scrape, instead of buckets, it is better to use a box fifteen or sixteen inches square and ten inches deep, supported on two short legs, so as to rest against the tree. The best implement for gathering scrape is a socket spade, so that the length of handle can be varied with the height of the work. The hard scrape will require to be trodden into the barrels.

7. A hand should dip 1,800 to 2,000 boxes a day, or fill five or six barrels, so as to get over his task in six or eight days. It will require more time to collect the hard turpentine.

Chipping.—Next to careful boxing, the length of time that your trees will continue to yield will depend upon the manner chipping is done.

1. The instrument used is called a "hacker" or "shave" from its resemblance to a cooper's round shave, only that the cutting part should be shaped to a rounded point, an inch or three quarters in diameter, and be supported on a strong spike, to be inserted in a handle of convenient length, according to the height of the chipping.

2. Take care that the chip extends across the tree no wider than the box; and for new or awkward hands it will save much waste to have perpendicular lines drawn up the tree from each corner of the box.

3. From each of these lines the chips should be cut in a down slope towards the centre of the box. Each fresh chip to be cut at the upper edge of the old one, about a quarter of an inch deep into the wood. A narrow chip or cut will bleed as freely as a wide one; half an inch is sufficient. And by this means your trees can be worked longer. If trees are skillfully chipped they will last eight or ten years.

4. A good hand will chip over his task once a week. And, as it is important to have it done by the strongest and most expert hands, these should be kept at it regularly through the season, while women or inferior hands can dip very well. One hand can dip four tasks, while the best hands are kept busy chipping, and should go over the whole four or five times between each dipping. On this plan the boxes first full can be attended to without interrupting the chipper.

Hauling.—One hand strong enough to load, with a pair of good mules and a suitable wagon, will haul the turpentine dipped by ten hands an average distance of three miles, with spare time for hauling provisions, empty barrels, &c.; and in the winter can be employed in hauling barrels, staves, ploughing in oats, or preparing ground for early peas and potatoes, so as to provide a large part of their own forage for himself and team.

BARRELS.—1. The barrel is made thirty-two inches long, including chines, and the head about seventeen inches across, with a little bulge in the middle. The staves and heading of pine, to be three-quarters or seven-eighths of an inch thick, secured with six strong wooden hoops.

2. A barrel of turpentine must weigh two hundred and eighty pounds, and any over and under weight is added or taken off, as the case may be, in calculating all sales. No allowance for weight of barrel.

3. A cooper's task, when working by the day or month, is five barrels. His price is twenty to twenty-five cents a barrel for making, when all materials are found him, and when he finds all, from thirty-one to thirty-seven cents a piece.

4. Heading and staves of heart pine are worth $5 a thousand. Sap staves one-fourth less, as they are only fit to hold the hard turpentine or scrape. They should be got out and hacked up and dried two or three months before being worked up. Hoop-poles, about six feet long, of hickory, white oak, or water oak, are worth twenty to twenty-five cents per hundred, delivered.

5. In a gang of hands getting turpentine every fifth man may be a cooper, and will be employed the year through in providing his own materials and keeping the others supplied with barrels.

GUARDING AGAINST FIRE.—The evil consequence of getting a turpentine plantation on fire is so great as to justify the labor of hoeing around the boxes, so as to clear away all the grass and pine straw to a distance of four or five feet. This will employ a hand four or five weeks in the winter. The State ought to protect this important interest, by enacting severe penalties against those who set out fire where it can extend among trees boxed for turpentine.

GENERAL REMARKS.—The turpentine business is considered a very healthy employment for hands. It may be carried on with little capital, on lands too poor for cultivation, and is, therefore, well suited to persons of small means. If there is one hand, in the poorest family, able to cut boxes and chip them afterwards, the dipping can be done by women and half-grown children. A poor family, living near a still or river, may make something, even if they hire their boxes to be cut, buy their barrels, and hire the hauling.

On the other hand, no business makes better returns for common labor, take one year with another, not even the culture of cotton and tobacco, especially when the amount of capital employed is taken into consideration. A prime experienced hand, in a plantation newly opened, has gathered $600 or $700 worth of turpentine in a year, leaving a net sum of $400 or $500, after all deductions for barrels, hauling, provisions, &c. Two hundred dollars per hand, clear of all expenses, including the wages to an overseer, is a very moderate result for an average lot of hands.

The usual price for cutting good boxes is $1 per hundred, and food for the hand.

Twelve thousand boxes are an average task, in chipping and dipping. Extra prime hands have tended as high as fifteen or sixteen thousand, but ordinary hands will not do justice to more than ten thousand.

Good trees will yield about three barrels to the thousand boxes at each dipping for the first three years, one-sixth of this being *hard* or *scrape* the second year, and one-fifth the third year. The proportion of *scrape* increases as the chipping extends higher up the tree, until it makes half the crop, while the dippings of *soft* turpentine will be reduced to three or even two a year. It will, therefore, be necessary to add some new boxes to the task every year after the fourth, to keep up the profitable business. In young thrifty trees this may be done without increasing the bonds of a task, if the number of boxes was limited at first, as previously directed.

Virgin dip is the name given to all turpentine gathered the first year from new boxes; although the first three dippings make much the brightest and best rosin, and on this account is worth fifty or seventy-five cents a barrel more than—

Yellow dip, which is the name of all soft turpentine taken from the boxes after the first year.

Hard or scrape is the name for the turpentine which hardens on the face of the chipping and never reaches the boxes. This makes a pretty fair rosin, but yields not more than a third of the quantity of spirits, and is worth about half price.

The evaporation of spirits from all soft turpentine is very rapid in hot dry weather, and this makes it important to dip and deliver it at the still without unnecessary loss of time.

Virgin dip will yield about five and a half gallons of spirits to the barrel (of 280 pounds) for the first three dippings, and from five and a half to six gallons later in the season.

Yellow dip, if delivered early, will turn out six to six and a half gallons. The scrape rarely makes as much as three gallons, very often not more than two or two and a half to the barrel.

On an average, all kinds will make two barrels of rosin from three of raw turpentine.

The distiller, therefore, will have three of his barrels surplus, which, with slight repairs, will serve as well as new ones for future dippings.

When virgin dip is worth $2 50 or $2 75 a barrel, yellow dip is worth about $2, and the scrape about $1 25 a barrel.

To justify the distiller in paying the above prices, spirits of turpentine should be worth forty cents a gallon in the New Orleans market, upon the supposition that the entire expense from the still does not exceed eight cents a gallon on spirits, and forty cents a barrel on rosin. When spirits are selling in New Orleans at thirty-six cents, the raw article is worth twenty cents a barrel less at the still, at the same rate of expense in sending the manufactured article to market.

The distiller incurs great expense in the single article of spirit barrels. These must be iron bound, made in the best manner of seasoned white oak, and well coated within with glue, to prevent evaporation. They should contain from forty to forty-five gallons, and when ready for use cost little short of $2 a piece. As there must be one spirit barrel provided to every seven of soft turpentine, the demand for these barrels will of itself open an extensive new branch of bnsiness. Let these, by all means, be made at home.

A word more at the close. It is said above that a turpentine plantation will last eight or ten years. This is meant for Florida and southwestern Georgia. In North Carolina, with careful working, it lasts twelve or fourteen years. And then begins the business of making tar from trees exactly prepared for it by the previous culture. This is nearly as profitable as making turpentine, and will furnish employment for several years longer.

METEOROLOGY FOR THE FARMERS.

LIEUT. MAURY'S NEW ENTERPRISE.

Lieutenant Maury has presented to the farmers of the United States, through the columns of the American Farmer, the outline of a plan for a general system of meteorological observations on land. The high reputation of this gentleman, his eminent services not only to physical science but to the commercial interests of the country, his practical sense and trustworthy judgment, cannot fail to secure attention to his suggestions.

The plan is simple. It proposes that farmers and planters should co-operate all over the country in a regular and systematic method of meteorological observations. The information so collected as to the winds, rains, and similar phenomena, is to be forwarded to Washington city, and measures are to be adopted to enlist the agency of the government in arranging the facts for publication. There can be no doubt that the government will lend its aid to the furtherance of this great work. Lieutenant Maury states that such an office as will be required in Washington to carry out the details of this plan is already in existence. It was established by Mr. Calhoun when he was Secretary of War, and it is under the control of the Surgeon General of the army. The meteorological observations that are made at our military posts are discussed and published at this office; and "one of the most valuable and interesting reports concerning the meteorology and climates of the country that have ever appeared is now in course of publication there."

The plan, it will be perceived, is similar to the one which has been so successfully adopted on the sea. By the observations which have been made on the ocean, a vast mass of most important and valuable information has been collected. The results of these extended observations have been embodied in the "Wind and Current Charts," which have proved of such immense service to navigation. Other nations, following the scientific lead of Lieutenant Maury,

have united in this useful work, so that now the ocean is literally covered with "floating observatories," and "every ship that sails is converted into a temple of science. It has been estimated that millions of dollars have already been saved to commerce by the "Wind and Current Charts." The farmers and planters of the country have been likewise benefitted; for not only have ships been enabled to make quicker voyages, and at lower rates, but new markets, that were before practically inaccessible by reason of length of time, have been brought within easy reach by the increased facilities of transportation.

If this system of close and accurate observation of the facts of meteorology in all its relations to agriculture, health, and similar matters, is adopted on land, it must result in great benefit to our country. As Lieutenant Maury justly remarks, there are "mighty harvests of many sorts" in these meteorological fields, and we have no doubt whatever, that if the proper spirit of research is applied, we shall have a new era in our knowledge of the wonders of the atmosphere, and its connexion with industry, health, and life. We beg the attention of our farmers and planters to this movement. It deserves the largest and most liberal sympathy. It is fraught with invaluable advantages to every domestic interest of the country. Our agricultural associations ought to take up the subject immediately, and prepare memorials to Congress for the slight aid that might be needed to get it under way.

We publish below a letter to us from Lieutenant Maury on this subject. Though not written for the public eye, we have taken the liberty, in view of the important matter discussed, to lay it before our readers, hoping that its vigorous thought and philanthropic spirit may induce general attention to the views advanced:

CHARLOTTSVILLE, *Virginia, August* 23, 1855.

MY DEAR SIR: I am in want of a champion in Alabama for a good cause, and therefore address myself to you without further apology.

My investigations of the winds at sea have impressed me with the idea that as much may be done for agricultural and sanitary meteorology as has been done for that of the sea. I have so stated publicly, and given the details of the plan in the August number of the American Farmer, an agricultural paper published in Baltimore. I will send you a copy of it if I can procure one. The plan is simply that the farmers and planters should lend that sort of co-operation on the land that the merchants and sailors have afforded at sea, and that the government should then do its part by having the observations thus procured, discussed, and published.

There are truth-loving, knowledge-seeking men in every county in every State, who would be glad to co-operate in such a plan. They would readily undertake to make the requisite observations if they were furnished with the needful formulæ, and had the assurance that their observations should be discussed and published for the benefit of all. Nay, there are unreduced observations enough now in the country, lying in the desks of those who made them, from which as much useful information may be gathered as we culled from the old log-books; and I have no doubt that the desks and drawers of meteorological observers on the land would open quite as readily to the call as the old sea-chests of the mariner did. As for the trial to see what a systematic plan of observations will do for the advancement of agricultural meteorology and for the benefit of farmers and planters, I'll answer for the observations if government will furnish the means for their discussion and publication. I'll go further, and promise that the observations shall be furnished to the government for such a purpose *without cost*. You know the materials for the "Wind and Current Charts" were all furnished gratuitously, and that without asking government for a single cent we have literally covered the ocean with floating observatories, and converted every ship that sails into a temple of science. Not only governments but nations and people have united with me, and are assisting to carry out a system of meteorological research for the sea. As much may be done for the land if the planters and farmers of the United States will only second the effort, and tell their representatives in Congress that they want as much done by the government for agricultural and sanitary meteorology as it has *permitted* to be done at sea for the benefit of commerce and navigation. By the saving of time on the voyage, and the lessening of the dangers by the way, these interests, it has been computed both in this country and England, have been benefitted to the extent of millions annually. Some of

these benefits have inured also to agriculture, not only by giving an opportunity to the farmer to get markets beyond the sea cheaper, and enabling ships to fetch and carry for him at lower figures, but by bringing within reach markets which before were inaccessible by reason of the great length *in time* of the voyage.

Let us, therefore, extend this system of philosophical research to the land. It is very rich with promises of good, it will cost literally *almost* nothing, and will not the planters of Alabama, as well as the agriculturalists and agricultural societies of the other States, lend me a hand in "getting it under way?" * * *

Yours, truly,

M. F. MAURY.

Rev. Dr. LIPSCOMB, *of Southern Times, Montgomery, Alabama.*

AGAVA PLANT.

As this plant is becoming one of great importance to the country, a few remarks in relation to it will, no doubt, be interesting to the public.

It is a species of the "cactus," indigenous to South America, more particularly to that portion termed the Spanish Main, where it grows spontaneous in great abundance. The leaves of the plant are prepared into hemp, (called sisal.) Its sale in our market amounts to several thousand tons annually, at prices varying from $200 to $250 per ton.

Many years ago an enterprising gentleman, Dr. Perrine, a native of France, attempted to propagate its growth in this country at Key West and adjacent islands. Death, resulting from Indian hostilities in the vicinity, arrested him in his laudable endeavor. Since that period little attention has been given to its cultivation. The large demand, however, latterly, for the article, for manufacture into cordage, and that, too, at a high price, has produced an incentive among the citizens of Key West to turn their attention to its culture, at which place it grows to a limited extent, as will be shown by the following extract of a letter from a resident there:

"The sisal hemp is very successful. The plant (Agava Sisalana, or Americana) grows in the poorest kind of land; and even on the stony, barren island it grows very well. There are a few acres here just ready to be cleaned out for market; and it has been ascertained by experiment that an acre will yield one thousand dollars per annum after the fourth year. It requires no cultivation; just drop the seed in the ground, and you have nothing more to do with it for four years, when you can begin to cut and clean. The suckers are constantly springing up, so that by the time you cut down the first crop the second is ready to begin with, and so on untill the land is entirely exhausted."

Some nine years ago my attention was called to the weed by a gentleman from Florida, with a view to encourage its growth and to prepare it into hemp. The principal difficulty in the process was found in converting the leaves into hemp by machinery. To give facility to the operation, the ordinary mode of cleaning them (as practised by the natives of South America, where labor is of little or no value) being too tedious, I suggested a method (the one now in use at Key West) which gave facility to some extent, but which does not answer the purpose sufficiently well to make the enterprise profitable.

I also directed my attention to the best mode of cleaning the leaves by requesting the attention of some scientific gentlemen, Professor David A. Wells, of Springfield, Massachusetts, among others, to the discovery of some chemical process for the purpose, who hit upon a quick and cheap process. It, however, discolored the leaves to an extent which made them unsuitable for cordage.

Subsequently, at the request of Senator Mallory, I addressed a number of the eastern machinists on the subject, who, with much spirit and zeal, entered upon the experiment for devising a proper plan; and I am now happy to believe that this object is likely to be effected. As a proof of this, I give here an extract of a letter from Messrs. Kellogg & Co., of Pine Meadow, Connecticut. They say:

"The machine about which we wrote you March 20th, cleans the 'Agava plant' to our entire satisfaction. We had to make some little alteration in the construction of it after receiving the plant, but we have retained the principle. It works charmingly." D. M.

*Export of breadstuffs from the United States to Great Britain and Ireland, from September 1, 1854, to September 1, 1855.**

From.	Flour.	Meal.	Wheat.	Corn.
	Barrels.	*Barrels.*	*Bushels.*	*Bushels.*
New York	102,838	1,620	227,380	4,977,680
New Orleans	26,453	55	8,794	645,166
Philadelphia	13,635	3,624	33,078	885,203
Baltimore	8,015	104	24,526	321,193
Boston	76	3	5,000	14,000
Other ports	19,312	130	18,935	.....
Total	170,329	5,536	317,713	6,843,242
Last year	1,824,920	40,660	5,918,317	6,215,936
Increase	.....	.....	.....	627,306
Decrease	1,654,591	35,124	5,600,604	.....
Total year ending Sept. 1, 1855	170,329	5,536	317,713	6,843,242
Do. do. 1854	1,824,920	40,660	5,918,317	6,215,936
Do. do. 1853	1,618,060	683	5,543,460	1,517,087
Do. do. 1852	1,444,640	1,810	2,712,120	1,576,749
Do. do. 1851	1,581,702	5,553	1,523,908	2,368,860
Do. do. 1850	463,460	6,086	463,015	4,873,446
Do. do. 1849	1,118,316	86,058	1,091,385	12,729,626
Do. do. 1848	183,533	105,350	251,622	4,581,367
Do. do. 1847	3,150,689	847,280	4,015,134	17,298,744

*From the able commercial letter of Neuffer & Hendrix, Charleston, S. C.

NOTICES OF BOOKS.

Japanese Botany—being a fac simile of a Japanese book, with notes and translations; Lippincott & Co. publishers, No. 20 N. 4th street, Philadelphia.

This book is a copy of a Japanese book—not only in contents but in form. It contains about thirty spirited engravings of plants and flowers, with descriptions, all copied by the anastatic process. Among the pictures we recognise several old acquaintances, from which we may infer that the Japanese vegetation is similar to our own. There are two translations, a literal one conforming to the Japanese idiom, and a free translation of better English. The introduction contains an explanation of the alphabet, the numerals and manner of counting, the names of the months, and the time of day, measures of length and distance, &c. Besides being a valuable acquisition to the student, we consider this curiosity an appropriate ornament for the drawing room table.

Maud and other Poems; by Alfred Tennyson: Boston, Ticknor & Fields. The poems include "The Brook," "The Letters," "On the Death of the Duke of Wellington," "The Daisy," "Will," "The Charge of the Light Brigade."

Memoir on Meteorites; by J. Lawrence Smith, Professor of Chemistry in the University of Louisville. Dr. Smith has at a very early age established the reputation of being at the head of the list of American chemists. His lectures at the Smithsonian Institution, in Washington, were crowded for weeks with the best audiences that had ever assembled in the city. In the Memoir before us his high reputation is ably maintained.

Our thanks are due to Dr. E. Barton, of New Orleans, for a pamphlet in reference to his *Sanitary Report;* and we are glad to learn that this able and important work is to be republished at the north in a manner which will do credit to the value of the subjects which it discusses. At an early day we intend an analysis of the work for the pages of the Review.

We are also indebted to William S. King, recording secretary of the United States Agricultural Society, for the programme of its third annual exhibition, to be held in Boston on 23d to 26th of October, 1855. Ten thousand dollars has been offered in premiums, and twenty thousand dollars raised to defray the expenses of exhibition.